



**JEPPIAAR**  
ENGINEERING COLLEGE



**ELECTRONICS AND COMMUNICATION  
ENGINEERING**



**PRESENTS**

**A NATIONAL LEVEL TECHNICAL SYMPOSIUM**



**5<sup>th</sup> MARCH 2026**

**VOLUME-XVIII YEAR-2025-2026**



# MILESTONES OF ECE



# GLIMPSE OF NEXORA 2K25





## CHAIRMAN AND MANAGING DIRECTOR'S MESSAGE

With immense pride and heartfelt happiness, I take this opportunity to share my thoughts through the pages of this esteemed magazine. We are delighted to unveil "DECKTRON 2K26," the 18<sup>th</sup> edition of the Department of Electronics and Communication Engineering, which reflects the innovation and enthusiasm of our academic community. This magazine serves as a dynamic platform to uncover hidden talents and encourage creative and technical expression among students and faculty. Entirely driven by students, it showcases their teamwork, dedication, and leadership. I sincerely appreciate their efforts and extend my best wishes for the grand success of the 18<sup>th</sup> Inhouse Symposium of ECE.



**Dr. Regeena J Murali , B.Tech, MBA, Ph.D**  
**Founder & Chancellor, Jeppiaar University**  
**Chairman and Managing Director**  
**Jeppiaar Group of Institutions**

**Founder & Chancellor**



## DEAN'S MESSAGE



It is with profound pleasure and pride that I acknowledge the forthcoming publication of the Souvenir of the Symposium "DECTRON 2K26." On this distinguished occasion, I extend my heartfelt congratulations to the organizing committee. Such symposiums stand as noble platforms that refine intellect, nurture talent, and cultivate excellence among our budding engineers. They inspire confidence, elevate knowledge, and shape responsible citizens of tomorrow. I warmly welcome all participants and commend the Head of the Department, faculty, staff, and students for their unwavering dedication. May this grand endeavor inspire innovation, strengthen collaboration, and mark a truly glorious success.

Dr. Shaleesha A Stanley, M.Tech, Ph.D, D.Sc

DEAN (ACADEMICS)



## PRINCIPAL'S MESSAGE

I am delighted to acknowledge the release of the Souvenir for the Symposium "DECTRON 2K26" and extend my sincere congratulations to the organizing team on this proud milestone. Events like DECTRON create vibrant spaces where ideas connect, innovation thrives, and young minds sharpen their technical and presentation skills. They empower students to think critically and grow into capable engineers and responsible citizens. I warmly welcome all participants and appreciate the committed efforts of the Head, faculty, staff, and students. Wishing everyone a dynamic, successful, and truly inspiring symposium experience.

**Dr.K. Senthil Kumar, M.E, Ph.D, FIE**

**PRINCIPAL**





## HOD'S MESSAGE



It brings immense satisfaction to see the symposium "DECTRON 2K26" take shape with such excellence and distinction at Jeppiaar Engineering College. The commitment, coordination, and perseverance displayed throughout its organization reflect the true spirit and capability of the department. Every detail of this event stands as a testament to the collective dedication of the faculty and the enthusiastic involvement of our students. Such initiatives strengthen our academic culture and create meaningful opportunities for innovation and intellectual exchange. There is great confidence that DECTRON will leave a lasting impression through its insightful discussions and inspiring outcomes.

**Dr.J.Jebastine, M.E, Ph.D**

**HOD - ECE**



# PINNACLE OF SUCCESS

The Department of Electronics and Communication Engineering proudly congratulates the Semester Toppers of Batch 2024-2028 ,Section A for their commendable performance in the Anna University Examination (April/May 2025). **Haresh R** secured Rank I with an impressive GPA of 9.08, **Jerolin I** achieved Rank II with a GPA of 8.96, and **Akshaya K** earned Rank III with a GPA of 8.58. Their achievements reflect consistent effort, determination, and a strong commitment to excellence.



The Department of Electronics and Communication Engineering extends its heartfelt congratulations to the Semester Toppers of Batch 2024-2028 , Section B for their outstanding results in the Anna University Examination (April/May 2025). **Vishali I** secured Rank I with an impressive GPA of 9.08, **Rithika P** achieved Rank II with a GPA of 8.27, while **Ram Prasad U** earned Rank III with a GPA of 8.23 , marking a significant academic achievement.



The Department of Electronics and Communication Engineering proudly congratulates the II/IV Semester toppers of Batch 2023-2027 for their excellent performance in the Anna University Examination (April/May 2025). In section A **Mathumitha C** secured Rank I with a GPA of 9.54. **Kanishka M** achieved Rank II with a GPA of 9.17, and **Janani Prabha P** also earned Rank II with a GPA of 9.08. The department appreciates their hard work and wishes them continued success.



The Department of Electronics and Communication Engineering congratulates the students of II/IV Semester, Batch 2023-2027, for their excellent results in the Anna University Examination (April/May 2025). In Section B, **Thamizselvi D** and **Vijayalakshmi N** secured Rank I with an impressive GPA of 8.88. **Suman Willson** obtained Rank II with a GPA of 8.67, and **Sri Bhavadharani R** achieved Rank III with a GPA of 8.63. The department is proud of their achievements and extends best wishes for their future endeavors.



The Department of Electronics and Communication Engineering extends its heartfelt congratulations to the VI Semester achievers of Section B, Batch 2022-2026, for their excellent results in the Anna University Examination (April/May 2025). **Yuvasree P** secured Rank I with an impressive GPA of 8.85. **Sancia Rosary A** achieved Rank II with a GPA of 8.70, while **Nithya Sri T** earned Rank III with a GPA of 8.60. Their accomplishments reflect dedication, determination, and academic discipline. The department proudly recognizes their efforts and encourages them to continue striving for greater success.



The Department of Electronics and Communication Engineering proudly congratulates the VI Semester toppers of Batch 2022-2026 for their commendable performance in the Anna University Examination (April/May 2025). In section A, **Janani P** secured Rank I with a GPA of 8.95, demonstrating outstanding academic excellence. **Aswin D P** and **Janavi G** achieved Rank II with a GPA of 8.64, reflecting their consistent efforts and dedication. **Akula Mahalakshmi**, **Harini K**, and **Kaviya A** earned Rank III with a GPA of 8.45, marking a significant academic achievement. The department appreciates their hard work, perseverance, and commitment to excellence, and wishes them continued success in their academic and professional journey.

◆ **GREAT ACHIEVEMENTS BEGIN WITH THE DECISION TO EXCEL** ◆



# FACULTY INSIGHTS



## Artificial Intelligence in Production & Operations Management: Transforming Modern Industry

Artificial Intelligence (AI) is transforming Production & Operations Management (POM) by improving how industries plan, control, and optimize their processes. From demand forecasting and inventory management to predictive maintenance and automated quality inspection, AI uses machine learning, data analytics, and sensor-based systems to enhance efficiency and accuracy. It helps organizations reduce downtime, improve product quality, optimize supply chains, and create smarter production schedules through real-time data-driven decisions.

As industries move toward Industry 4.0, AI becomes a strategic tool for achieving higher productivity, lower costs, and faster response to market changes. Although challenges like high investment, data management, and skill gaps exist, the integration of AI with IoT, robotics, and digital systems is paving the way for intelligent, self-optimizing factories and a more competitive industrial future. It enables real-time monitoring and data-driven decision-making across production lines. AI also improves operational accuracy by minimizing errors and enhancing quality standards. In the long term, organizations adopting AI-driven operations gain stronger resilience and sustainable growth in a rapidly evolving global market.

## 6G and the Internet of Everything: A New Era for Communication

Expected around 2030, 6G technology represents a monumental leap toward the Internet of Everything (IoE). While 5G revolutionized mobile connectivity, 6G aims to connect every facet of life—from smart cities and self-driving vehicles to remote medical devices—at speeds up to 1 Tbps, nearly 100 times faster than today's standards. This transition is powered by cutting-edge innovations like Artificial Intelligence for automated network management, terahertz communication for massive data transmission, and integrated satellite networks to provide global coverage, even in remote areas. For Electronics and Communication Engineering (ECE) this evolution creates a wealth of opportunities in antenna design, VLSI chip development, and AI-based networking. However, the path to commercialization faces significant hurdles, including high infrastructure costs, the need for advanced hardware to handle high-frequency signals, and the challenge of reducing power consumption. Ultimately, 6G transcends simple internet speed; it will fundamentally transform human interaction through applications like holographic video calls and zero-delay remote surgeries, shaping a more immersive, intelligent, and hyper-connected future.





Left to right

1. The hot resistance of the filament of bulb is higher than cold resistance of filament lamp because temperature coefficient of filament is\_\_\_\_\_.
2. The direction of electric dipole movement is \_\_\_\_\_ applied in electric field.
3. \_\_\_\_\_ was the first city in India to adopt electric traction.
5. What repeats what you say but has no mouth?
9. The frequency spectrum of a function is discrete if the function is \_\_\_\_\_.
11. The molecule that carries genetic information for the development and functioning of an organism

Down to up

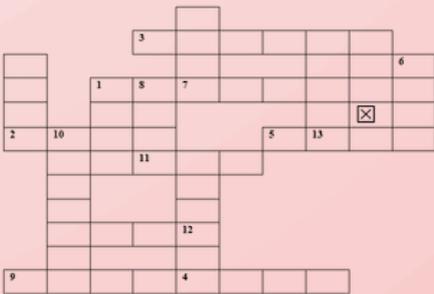
2. Basic circuit Law (reverse)
4. It is a paramagnetic material and a gas present in the air.
7. The firing of a gun
13. Which country hosted the 2008 Summer Olympics in Beijing?

Up to down

1. lift water high with force
6. The value of cross product of similar vector unit.
8. Display technology use organic component to emit light
10. Circuit cannot remain in one state.

Right to left

12. Not free or available to do something (reverse)



## Generative AI in 2026: Transforming Education, Research, and Industry

The rise of Generative AI in 2026 marks a transformative shift from simple automation to a sophisticated era of human-machine collaboration across education, research, and industry. In the classroom, AI acts as a 24/7 personalized tutor and instructional aid, moving the academic focus from rote memorization toward critical thinking through virtual simulations and interactive labs. Simultaneously, it serves as a powerful catalyst for scientific discovery, drastically accelerating innovation cycles in fields like drug discovery and climate modeling by generating

hypotheses and analyzing complex datasets. This integration is reshaping the global economy, contributing trillions in value while demanding a new standard of AI literacy for the modern workforce. However, this rapid evolution brings significant ethical and regulatory responsibilities that necessitate a balance between innovation and accountability. As AI-driven tools optimize everything from manufacturing prototypes to medical diagnostics, society must grapple with challenges surrounding data privacy, algorithmic bias, and the proliferation of deepfakes.





## Quantum Key Distribution A New Paradigm for Secure Communication

In the face of rising quantum computing threats that jeopardize classical encryption like RSA and ECC, Quantum Key Distribution (QKD) provides a shift from mathematical complexity to the laws of physics. By leveraging principles such as superposition, entanglement, and the no-cloning theorem, QKD allows two parties to generate a secret key using photons; any attempt at eavesdropping inevitably disturbs these quantum states, instantly alerting the users. Protocols like BB84 demonstrate this "information-theoretic security," ensuring that data remains protected

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## Recent Technologies in VLSI

The landscape of Very Large Scale Integration (VLSI) is shifting from simple transistor scaling to complex architectural and material innovation. As traditional CMOS reaches its physical limits, the industry is transitioning to Gate-All-Around FET (GAAFET) structures, such as nanosheets, which provide superior electrostatic control and reduced leakage compared to FinFETs. To overcome the "memory wall," Advanced Packaging techniques like 2.5D/3D integration (e.g., Intel's Foveros and TSMC's CoWoS) allow for chiplet-based designs and high-bandwidth vertical stacking.

Furthermore, Silicon Photonics is being integrated to replace copper interconnects with high-speed optical data transfer, while AI-driven EDA tools are now automating floorplanning and power optimization to drastically reduce design cycles. Beyond silicon, researchers are exploring 2D materials like MoS<sub>2</sub> and Carbon Nanotubes (CNTFETs) to achieve higher mobility at the atomic scale. Coupled with low-power techniques like Near-Threshold Computing and DVFS, these advancements ensure that performance continues to scale even as Moore's Law faces significant physical hurdles.





## Role of Electronics and Communication Engineering in ISRO Missions



Electronics and Communication Engineering (ECE) forms the technological backbone of modern space exploration. Every ISRO mission—from launch vehicles to deep-space satellites—depends on advanced electronic and communication systems to ensure precision, reliability, and continuous data transmission. In launch vehicles, avionics systems designed with embedded processors and control algorithms manage guidance, navigation, and stabilization. Sensors such as gyroscopes and accelerometers provide real-time feedback, enabling accurate trajectory correction during flight. Communication engineering is equally critical. High-frequency RF

systems operating in S-band, X-band, and Ka-band facilitate telemetry, tracking, and command operations between spacecraft and ground stations. Advanced modulation and error-correction techniques ensure data integrity, even across millions of kilometers, as demonstrated in missions like Chandrayaan and Mangalyaan. Digital Signal Processing (DSP) enhances satellite imagery used in weather forecasting, remote sensing, and disaster management. Power electronics regulate energy from solar arrays, while radiation-hardened VLSI components ensure reliable performance in harsh space environments.

### The Silent Symphony: Engineering the Invisible

In a world captivated by what is visible—the sleek smartphone display, the silent speed of electric vehicles, and the brilliance of OLED screens—the real power of Electronics and Communication Engineering lies beneath the surface. ECE engineers design the invisible systems that make modern life possible. Every message sent across the globe travels through complex modulation techniques, wireless networks, routers, and signal processing systems within milliseconds. From IoT-enabled healthcare devices to autonomous vehicles, ECE forms the unseen backbone connecting people, machines, and intelligence in a seamlessly integrated world.

As technology advances, the future of ECE extends beyond simple binary logic into intelligent, energy-efficient systems. While Artificial Intelligence dominates headlines, ECE engineers focus on making AI hardware sustainable through innovations like neuromorphic chips, low-power VLSI design, and green communication technologies. An ECE mindset blends creativity with analytical precision—transforming noisy analog signals into clear digital communication and chaotic circuits into structured systems. The world may not see the electrons moving within circuits, but it undoubtedly experiences the transformative impact of the invisible engineering that powers tomorrow.





## Engineering Tomorrow: Emerging Trends Shaping the Future of ECE



Electronics and Communication Engineering (ECE) is central to today's technology revolution, influencing fast wireless networks and intelligent systems. The shift from traditional communication to AI integration, advanced semiconductors, and next-gen wireless networks is redefining the field. The rollout of 5G and research into 6G enable high data speeds and connectivity for billions of devices, driving the Internet of Things (IoT) with smart homes and autonomous vehicles. Edge computing enhances efficiency by processing data near its source. AI is increasingly integrated into communication systems, leading to innovations in robotics and sustainable electronics. The future of ECE hinges on interdisciplinary innovation, combining hardware, software,

communication, and sustainability, positioning ECE engineers to transform industries and enhance daily life. As ECE continues to evolve, educational programs must adapt to prepare students for these dynamic developments. This involves a curriculum that not only covers the traditional pillars of electronics and communication but also embraces the latest advancements in technology. Students should be encouraged to engage in collaborative projects that mirror real-world challenges, fostering skills like critical thinking, creativity, and teamwork.

### The Next Circuit: Preparing the Renaissance Engineer

The study of electronics has evolved from a focus on individual components like transistors to a complex, systems-level discipline that requires a curriculum balancing foundational theory with emerging technologies. While a core understanding of circuit analysis, semiconductor physics, and analog/digital design remains essential, modern programs must integrate embedded systems, digital signal processing, and power electronics to remain relevant. This shift demands a pedagogical move toward project-based learning, where students move beyond passive lectures to tackle open-ended design challenges engineer" who is not just a circuit designer but a systems thinker capable of innovating across disciplines. makerspaces, learning to simulate, prototype, and debug real-world systems. Looking forward, the field must prepare engineers for grand challenges like the Internet of Things, AI at the edge, and quantum engineering, ultimately cultivating a "renaissance engineer" who is not just a circuit designer but a systems thinker capable of innovating across disciplines.





## Artificial Intelligence Methods in Carotid Artery Segmentation



The carotid artery is a critical vessel supplying blood to the brain, where issues like thrombus or plaque buildup can lead to life-threatening ischemic strokes. To predict and treat stroke risk, clinicians rely on measuring intima-media thickness and plaque volume through medical image segmentation. While manual measurement is difficult due to complex arterial shapes, recent advancements in artificial intelligence—specifically deep learning and traditional machine learning—have enabled automated, highly accurate segmentation of the carotid lumen and plaques. Effective image segmentation begins with preprocessing, which optimizes feature extraction for AI models.

The approach varies significantly by imaging modality: Ultrasound (US) images often require heavy denoising and contrast enhancement to overcome low quality and artifacts. In contrast, MRI and CT scans generally possess higher clarity and typically only require normalization. By tailoring these preprocessing steps to the specific physical characteristics of the scan, researchers can significantly improve the performance of automated diagnostic tools.

### “The Age of Intelligent Machines: Autonomous Robotics in the Modern World”

The shift from traditional drones to AI-powered robots is transforming industries by enabling autonomous, adaptive, and intelligent operations. Unlike drones with fixed paths, AI robots use machine learning, computer vision, and sensor fusion to navigate complex environments, avoid obstacles, and coordinate in swarms. They come in aerial, ground, and hybrid forms, performing tasks such as agricultural monitoring, infrastructure inspection, logistics, and disaster response. With edge computing and real-time decision-making, these robots operate safely and efficiently, overcoming challenges like energy limits, regulatory compliance, and ethical considerations, redefining autonomy across sectors. As industries continue to embrace AI-powered robots, the potential for innovation seems boundless. In agriculture, these robots are revolutionizing crop management by providing precise data on soil conditions, plant health, and pest infestations, enabling farmers to optimize yields while minimizing resource use. Infrastructure inspection becomes safer and more comprehensive, with robots capable of accessing hard-to-reach areas, identifying structural weaknesses, and suggesting timely maintenance interventions.





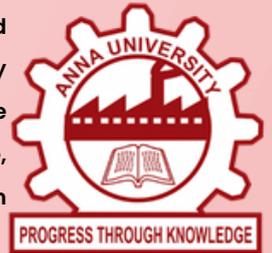
# DEPARTMENT EXCELLENCE

The Department organized a successful one-week AICTE-sponsored Faculty Development Program (FDP) on "Emerging Trends in AI and Future Applications". Funded with ₹1,00,000, the program aimed to enhance faculty knowledge in areas like machine learning and generative AI. Coordinated by Dr. V. Nanammal and Dr. G. C. Jagan, the FDP included expert lectures and interactive discussions, attracting faculty from various institutions and providing valuable insights into emerging AI technologies.



The Department promotes innovation through the Tamil Nadu State Council for Science and Technology's Student Project Scheme. It initiated a project on "Design of a Smart Safety Device for Women using IoT" under Dr. J. Jebastine, with a ₹7,500 grant, focusing on real-time alerts and location tracking. A project on "Centralized Monitoring System for Street Light Fault Detection and Location Tracking" was completed under Mr. E. Sakthivel, also funded with ₹7,500, aimed at smart city applications. Both projects reflect the institution's commitment to research and societal development.

The Department organized two successful Faculty Development Training Programmes one on Embedded and Real-Time Systems, and another on Digital Signal Processing. Both were sponsored by the Centre for Faculty Development, Anna University, each receiving a ₹70,000 grant. The programme, coordinated by Dr. J. Jebastine and focused on embedded systems and real-time applications. The programme, led by and Mr. J. Jebastine, covered DSP concepts and practical implementation. Both enhanced faculty academic and research competencies.



The Department of Electronics and Communication Engineering at Jeppiaar Engineering College enhances industry-academia collaboration through partnerships with organizations like NIELIT, BSNL, and Bosch. These collaborations focus on skill development, research innovation, internships, and entrepreneurial support, empowering students and faculty with practical experience and technical excellence, reflecting the motto "Precision in Partnership, Excellence in Execution." The department consistently strives to bridge the gap between theoretical knowledge and real-world applications. By engaging with industry leaders and experts, the department facilitates workshops, seminars, and training sessions that provide students with hands-on experiences and exposure to cutting-edge technologies.



Our department is delighted to share that it has been accredited by the National Board of Accreditation (NBA), a prestigious recognition awarded to programs that meet rigorous national quality standards. This accreditation reflects our unwavering commitment to academic excellence, outcome-based education, and continuous improvement in all aspects of teaching and learning. It acknowledges the strength of our curriculum, the dedication of our faculty members, the relevance of our industry-oriented practices, and the consistent achievements of our students. Receiving NBA accreditation is a proud milestone that reinforces our mission to provide high-quality technical education and prepare competent professionals ready to excel in their careers and contribute meaningfully to society. Our faculty members are at the forefront of pioneering research and innovation, fostering an environment that encourages curiosity and critical thinking. We focus on creating a holistic educational experience that not only imparts technical knowledge but also nurtures soft skills, ethical values, and a sense of social responsibility. Our state-of-the-art laboratories and facilities are equipped to support cutting-edge research and hands-on learning, ensuring our students are well-prepared for the challenges of the ever-evolving technological landscape.



◆ **BACKING BRILLIANCE TO BUILD A BETTER FUTURE** ◆



# ICONS OF EXCELLENCE

**Dr. J. Jebastine**, Professor and Head of the Department of Electronics and Communication Engineering, was honored with the **Best Academician Award** by the Puducherry Art and Research Academy. This prestigious recognition acknowledges his outstanding contributions to academic excellence, research, and institutional leadership.

He has played a vital role in mentoring students, encouraging innovation, and promoting research and academic development within the department. His dedication to maintaining high academic standards and fostering a strong learning environment has significantly enhanced the department's reputation. His visionary leadership and commitment to education continue to inspire both students and faculty members. This achievement reflects his sincere efforts in shaping future engineers and advancing technical education.



**NPTEL Elite Certification – Technical Communication**  
**Dr. G. C. Jagan** has successfully completed the NPTEL Online Certification course on Technical Communication for Engineers, offered by the prestigious Indian Institute of Technology Roorkee through the National Programme on Technology Enhanced Learning (NPTEL) platform. He secured an impressive consolidated score of **90%**, achieving full marks in online assignments (25/25) and 64.5/75 in the proctored examination.

**NPTEL Elite Certification – Educational Leadership**  
**Dr. G. C. Jagan** has also successfully completed the NPTEL Online Certification course on Educational Leadership, conducted by the esteemed Indian Institute of Technology Kharagpur under the National Programme on Technology Enhanced Learning (NPTEL) initiative. He secured a consolidated score of **86%**, scoring 24.75/25 in online assignments and 61.5/75 in the proctored examination.



◆ **GREAT MENTORS LEAD NOT ONLY BY TEACHING, BUT BY ACHIEVING** ◆



The Department of Electronics and Communication Engineering has received the **Best Department Award 2025**, recognizing its excellence in academics, innovation, and student achievements. This proud accomplishment reflects the dedication of both faculty and students and inspires the department to continue striving for greater success.

**Mrs. Gracelin Sheeba R** successfully completed the **NPTEL Online Certification (Elite)** course on Linear Programming and its Application to Computer Science conducted by Indian Institute of Technology Madras under NPTEL during Jul–Oct 2025 (12 weeks). She secured a consolidated score of **69%**, with 24.38/25 in Online Assignments and 45/75 in the Proctored Examination. Mrs. Gracelin Sheeba R remains a shining example of the power of inspiring her peers and students



**Mrs. Gracelin Sheeba R** has been recognized as an NPTEL Discipline Star in Computer Science and Engineering for the period Jan–Apr 2025. This prestigious recognition is awarded to candidates who successfully complete multiple NPTEL certified courses within the same discipline, demonstrating consistent academic performance and dedication to continuous learning. Earning the Discipline Star title reflects her strong subject knowledge, analytical skills, and commitment to professional development. Through certified coursework and proctored examinations, she has demonstrated technical competence and a proactive approach to enhancing her expertise. This achievement stands as a testament to her academic excellence and commitment to staying updated with emerging technological advancements.



**Mrs. Gracelin Sheeba R** has successfully earned the **SWAYAM-NPTEL Domain Certification** in Data Science (Computer Science) in April 2025. This certification recognizes the successful completion of a structured set of courses within the Data Science domain. This accomplishment highlights her strong foundation in data analysis, computational methods, and emerging data-driven technologies, reflecting her commitment to continuous professional development.

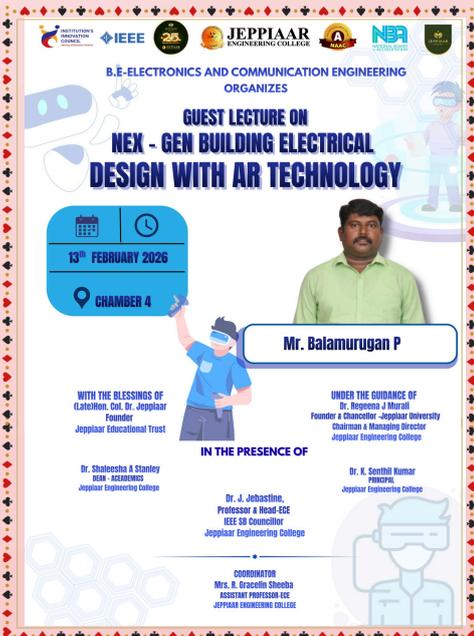




# BEYOND THE CLASSROOM

## Generative AI & Its Real-Time Applications

In collaboration with NIIT, the Department of ECE organized a forward-thinking guest lecture on "Generative AI & Its Real-Time Applications" on February 5, 2026, at Jeppiaar Educity. The session explored the transformative power of AI in full-stack development and automated systems. Experts shared valuable insights into how generative models are reshaping industry standards and creating new career paths. By exploring real-time use cases, students were inspired to integrate artificial intelligence into their engineering mindset, preparing them for a future where AI and human ingenuity coexist. The lecture highlighted several groundbreaking applications of generative AI, including its role in enhancing productivity through intelligent automation.

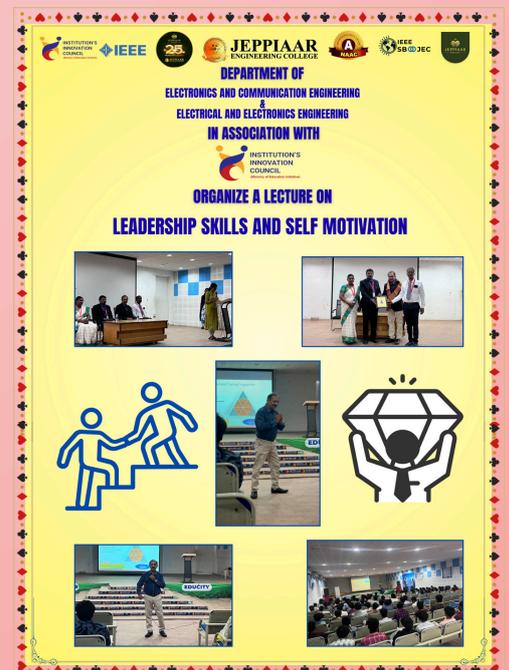


## Nex-Gen Building Electrical Design with AR Technology

Exploring the frontier of construction technology, the department hosted a guest lecture on "Nex-Gen Building Electrical Design with AR Technology" on February 13, 2026. Featuring Mr. Balamurugan P as the resource person, the event showcased how Augmented Reality (AR) is revolutionizing electrical blueprints and site planning. Students learned how 3D visualization and AR overlays can prevent design conflicts and improve safety in large-scale electrical installations. This session highlighted the college's commitment to exposing students to the "Next-Gen" tools that are currently defining the smart infrastructure industry. The integration of AR technology into building design not only facilitates more accurate and efficient.

## Leadership Skills and Self-Motivation

Fostering holistic development, the Departments of ECE and EEE, in association with the Institution's Innovation Council (IIC), organized a joint lecture on "Leadership Skills and Self-Motivation." This event moved beyond the technical curriculum to address the vital soft skills required in the corporate world. Speakers emphasized the importance of emotional intelligence, resilience, and the drive for self-improvement. By teaching students how to lead with confidence and stay motivated through challenges, the session played a key role in molding well-rounded professionals ready to take on leadership roles. Participants were encouraged to engage in interactive activities to practice these skills in real-time, fostering a collaborative and supportive learning environment.





## ESP Based Robotics Systems & Industrial Automation

The Department of Electronics and Communication Engineering at Jeppiaar Engineering College successfully organized a comprehensive five-day Value Added Course on "ESP Based Robotics Systems and Industrial Automation" from February 23 to 27, 2026. The session was led by Mr. V. Selvaraj, Founder & CEO of Make Labs & Make Vision. Students received hands-on training in ESP controllers, bridging the gap between theoretical circuit design and practical industrial applications. This initiative empowered participants with the skills necessary to navigate the evolving landscape of smart automation and robotic integration. The course included a series of interactive workshops, where students collaborated in teams to develop innovative projects

**B.E-ELECTRONICS AND COMMUNICATION ENGINEERING ORGANIZES A VALUE ADDED COURSE ON**

# ESP Based Robotics Systems and Industrial Automation

**23.2.26 to 27.2.26** | **ECE Seminar Hall**

**WITH THE BLESSINGS OF**  
 (Lalitha) Mrs. C. Dr. Jeppiaar  
 Founder  
 Jeppiaar Educational Trust

**UNDER THE GUIDANCE OF**  
 Dr. Rajasekar J. Murali  
 Founder & Chancellor, Jeppiaar University  
 Chairman & Managing Director  
 Jeppiaar Engineering College

**IN THE PRESENCE OF**

Dr. Shalini A. Srinivas  
 Dean - Academics  
 Jeppiaar Engineering College

Dr. V. Senthil Kumar  
 Principal  
 Jeppiaar Engineering College

Dr. J. Jobastina  
 Professor & Head, ECE  
 IEE & AEC Coordinator  
 Jeppiaar Engineering College

**COORDINATOR**  
 Dr. V. Nandimol  
 Assistant Professor, ECE  
 Jeppiaar Engineering College

Mr. V. Selvaraj  
 Founder & CEO  
 Make Labs & Make Vision

**B.E-ELECTRONICS AND COMMUNICATION ENGINEERING ORGANIZES**

## RESUME MASTERY UNLOCK YOUR POTENTIAL

(PLACEMENT TRAINING SESSION)

**III YEAR - ECE BATCH : 2023-2027**

**29 JANUARY, 2026**  
 10:00 AM - 1:30 PM

**ECE SEMINAR HALL**

## Resume Mastery: Unlock Your Potential

On January 29, 2026, the ECE department conducted a high-impact placement training session titled "Resume Mastery: Unlock Your Potential" for the III-year ECE batch (2023-2027). Held in the ECE Seminar Hall, the workshop focused on the art of professional storytelling and technical branding. Students engaged in interactive sessions to refine their CVs, learning how to highlight project experience and technical competencies. The event was a crucial milestone in our mission to ensure that every student is industry-ready and equipped with the tools to secure placement in top-tier organizations. The workshop featured insights from industry experts who shared valuable tips on personal branding and the importance of tailoring resumes to specific job roles.

## Innovative Problem Solving with MATLAB

A guest lecture on "Innovative Problem Solving with MATLAB" was hosted at the Elite Seminar Hall on February 2, 2026. The session aimed to demystify complex computational logic and signal processing using the MATLAB environment. Through live demonstrations of waveform plotting and algorithmic modeling, students gained insights into how simulation tools can accelerate the engineering design process. The lecture emphasized the importance of numerical computing in modern research, encouraging students to apply these methodologies to their academic projects and future technical challenges. Students were particularly engaged during the interactive segments, where real-world engineering problems were presented, and solutions were collaboratively explored using MATLAB's versatile toolkit.

**B.E-ELECTRONICS AND COMMUNICATION ENGINEERING ORGANIZES**

## GUEST LECTURE ON INNOVATIVE PROBLEM SOLVING WITH MATLAB

**2 FEBRUARY, 2026**  
 10:30 AM - 12:00 PM

**ELITE SEMINAR HALL**

◆ **CREATING OPPORTUNITIES BEYOND THE CLASSROOM** ◆



# STUDENT'S SHOWCASE

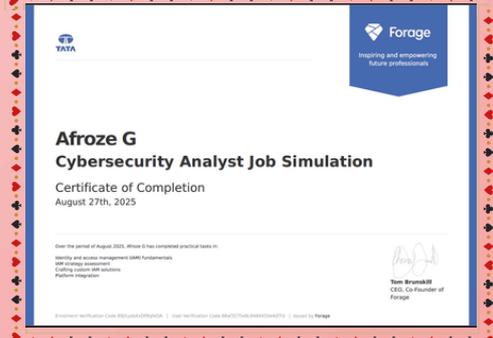
**Patrick Rohan V and D. Pavithra** proudly secured a top position in the Paper Presentation event held on 4th February 2026 at Chennai Institute of Technology, organized by TALOS. Representing Jeppiaar Engineering College, they demonstrated strong technical knowledge, confidence, and effective presentation skills. Their presentation was well-structured, insightful, and supported by thorough research. Their achievement highlights the academic excellence and competitive spirit of the ECE department. This achievement reflects their dedication, innovative thinking, and ability to perform on a competitive academic platform. Congratulations to both on this well-earned recognition. Their success in the event is a testament to the rigorous academic environment fostered by Jeppiaar Engineering College, which encourages students to push boundaries and explore new ideas.



This certificate is awarded to **G. Jai Vignesh** for securing 1st place in the UNSCRIPTED event at St. Joseph's College of Engineering. His outstanding performance, creativity, and effective communication skills distinguished him. Demonstrating exceptional stage presence and articulate ideas, he excelled among talented participants in a dynamic environment. This achievement reflects his dedication and ability to think spontaneously under pressure. Congratulations on your success and best wishes for future endeavors.



**Afroze G**, a proactive third-year student, has achieved multiple certifications that highlight his dedication to professional growth. He completed the Bootstrap Project PhonePe course on Unstop and participated in the National Road Safety Hackathon 2025 organized by Indian Institute of Technology (IIT) Madras. He also successfully completed job simulations with Accenture and Tata Group, strengthening his skills in development and cybersecurity.



◆ TALENT IN SPOTLIGHT ◆

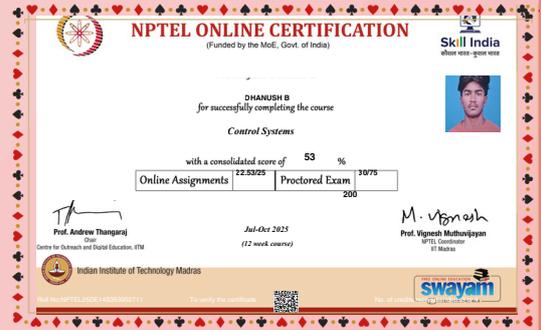


**Samvritha S** of ECE-B has been honored with a Certificate of Achievement for her outstanding performance in Canvas Dreams 2025, organized by the Young Indians YUVA Club of Jeppiaar Engineering College. Securing second place in the event, she showcased remarkable creativity, originality, and artistic excellence. Her work reflected not only her talent but also her dedication, passion, and commitment to expressing ideas through art.



**Thanussmitha S** successfully completed the NPTEL Online Certification (Elite) course on Introduction to Industry 4.0 and Industrial Internet of Things conducted by the Indian Institute of Technology Kharagpur (Jan-Apr 2025, 12 weeks). She secured a consolidated score of 70%, with a perfect 25/25 in Online Assignments and 45/75 in the Proctored Examination, reflecting strong understanding and consistent performance.

**Dhanush B** successfully completed the NPTEL Online Certification course on Control Systems conducted by the Indian Institute of Technology Madras during Jul-Oct 2025 (12 weeks). He secured a consolidated score of 53%, with 22.53/25 in Online Assignments and 30/75 in the Proctored Examination. This accomplishment reflects his understanding of fundamental control system concepts and his commitment to strengthening his core.



**Thasmithaa S** successfully earned the NPTEL Online Certification (Elite) in Introduction to Industry 4.0 and Industrial Internet of Things from the Indian Institute of Technology Kharagpur (Jan-Apr 2025, 12 weeks). She secured a consolidated score of 70%, with 25/25 in Online Assignments and 45/75 in the Proctored Examination, demonstrating consistent academic performance. This certification highlights her understanding of Industry 4.0, Industrial IoT, and modern industrial.

Heartiest congratulations to **Ms. R. Jeevitha R**, IEEE Chairperson from the Department of Electronics and Communication Engineering, on receiving the prestigious Best MAS Student Volunteer Award from Dr. Sathivel, Chairman of the IEEE Madras Section. This distinguished recognition is a testament to her exceptional leadership, unwavering dedication, and remarkable contributions to IEEE activities at both the institutional and regional levels. Through her dynamic guidance, she has successfully organized impactful technical events, encouraged active student participation, and fostered a strong professional culture within the ECE department. Her commitment, enthusiasm, and ability to inspire her peers have not only





This certificate is proudly presented to **MUHIDHA DEVI** in recognition of her enthusiastic participation in the **India's Young Scientist 2025 Competition** at the Youth United Festival. Her dedication, curiosity, passion for scientific learning, and commitment to excellence are truly commendable. She demonstrated analytical thinking, innovation, and a strong scientific temperament throughout the event. She approached the competition with discipline, clarity of thought, curiosity, willingness



and technological advancement. We appreciate her involvement and wish her continued success in all future endeavors. Her achievements serve as an inspiration to many young minds with similar aspirations. As she continues to explore the vast realms of science and technology, we are confident that her journey will be filled with groundbreaking discoveries and innovations.

### Bronze Glory at the Chief Minister's Trophy 2024



**Kathiravan** proudly secured a podium finish at **The Chief Minister's Trophy 2024**, demonstrating exceptional athletic performance and determination. Competing among top athletes, he earned recognition for his strength, discipline, and competitive spirit. His achievement reflects months of rigorous training, mental resilience, and unwavering commitment to excellence. This milestone marks another step forward in his journey as a dedicated sports person, bringing pride to his supporters and the sporting community. He displayed remarkable focus under pressure and maintained consistency throughout the competition. His performance stands as a testament to perseverance, hard work, and a winning mindset. His strategic preparation and disciplined routine played a crucial role in his success. He approached every round with confidence and composure, setting himself apart from strong contenders. This accomplishment not only highlights his current form but also signals greater achievements ahead.

Heartiest congratulations to **Evangeline A**, **Karthikeyan K B**, and **Vishva K** for securing 3rd place in the **ExoSolve event** held at St. Joseph's Institute of Technology. Their achievement reflects strong technical knowledge, teamwork, and problem-solving skills. Competing with enthusiasm and determination, they showcased their talent and brought pride to the ECE department. Wishing them many more successes in the future!





## PROJECT PRESENTATION IN "IP CONCLAVE"



Kannan, Gokul Sarathy, and Jony Felix, along with Mrs. Gracelin Sheeba, Faculty of the Department of Electronics and Communication Engineering, proudly presented their innovative project before Mr. Udhayanidhi Stalin Honorable Deputy Chief Minister of Tamil Nadu. This distinguished opportunity reflects the team's strong technical knowledge, collaborative spirit, and commitment to research-driven innovation. Their presentation showcased practical problem-solving skills and the real-world impact of their work. Such recognition at the state level is a testament to their dedication, perseverance, and academic excellence, bringing immense pride to the ECE department and the institution as a whole.

Demonstrating a strong commitment to practical learning and industrial exposure, **Susinth II ECE B (2024-2028)**, a dedicated student of our institution, successfully completed an intensive **Internship Training in Embedded Systems at Tech Vedhu**. The training took place from December 13, 2025, to January 6, 2026. During this period, Susinth exhibited keen enthusiasm and a professional work ethic, gaining valuable hands-on experience in embedded technologies. This successful completion highlights our students' drive to complement their academic curriculum with real-world technical expertise in specialized engineering domains. Susinth's accomplishments were further recognized through his active participation in collaborative projects that integrated theoretical concepts with practical applications.



We are proud to celebrate the outstanding dedication of **Marvin Mathew**, who has been honored as the **Best Volunteer of the Month by the IEEE Student Branch of Jeppiaar Engineering College (IEEE SB JEC)**. Marvin's consistent efforts and leadership in supporting departmental activities have set a benchmark for peer engagement and community service. This recognition underscores the importance of extracurricular involvement in shaping well-rounded engineers. Marvin's ability to balance academic responsibilities with his passion for volunteerism demonstrates his exceptional time management skills and dedication to making a positive impact. His contributions have not only strengthened the IEEE Student Branch.



**Mr. Nishanth E** was honored with the prestigious Star Award by the **Maatram Foundation** in recognition of his exceptional dedication, leadership, and commitment to social service. This award is presented to individuals who demonstrate outstanding initiative in contributing to meaningful community development activities. Through his active participation in volunteering programs and awareness initiatives, he has consistently shown a strong sense of responsibility toward society. His achievement reflects not only his personal excellence but also the values of compassion, service, and leadership upheld by the department. This recognition stands as an inspiration to fellow students to actively engage in social causes and strive for holistic development beyond academics.



**Ms. Marieswari and Mr. Rajapriyan** of II Year Electronics and Communication Engineering secured the **runners-up position** at **Glitzz'25**, an inter-college event organized by AM Jain College, Chennai. Their participation contributed to a noble cause aimed at providing essential equipment and nutritional support to children and cancer patients. Through their enthusiastic involvement and teamwork, they demonstrated both technical competence and social awareness. Their achievement reflects the department's encouragement of students to actively participate in extracurricular and socially responsible initiatives. Their success serves as a motivation for their peers to pursue excellence while contributing to meaningful causes that benefit society.

**Mr. Karthikeyan K B** achieved global recognition by being selected as the **Graphic Design Co-Lead for IEEE Day 2025**. In this role, he contributed to designing creative visual materials that were used internationally to promote IEEE Day celebrations. His selection reflects his exceptional creativity, technical skills, and ability to contribute to a global professional community. This achievement highlights the growing presence of ECE students in international technical and creative platforms. His accomplishment serves as an inspiration for students to explore diverse talents and contribute at a global level. His commitment to excellence and innovation not only enhances the reputation of the department but also encourages peers to think beyond conventional boundaries.

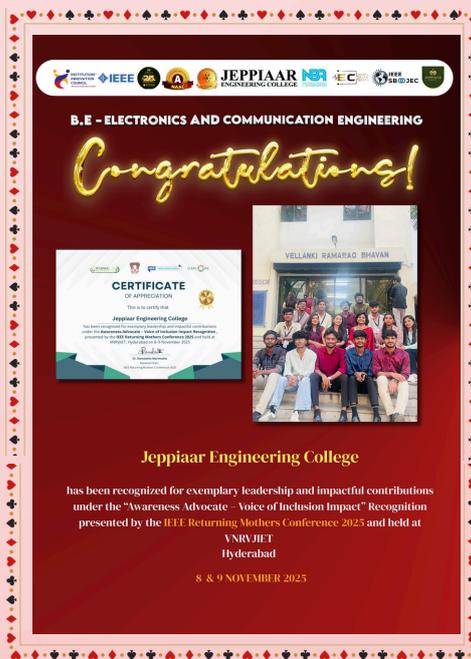




**Mr. Anandh A and Ms. Priyanka D** were recognized for their valuable contributions and volunteer leadership during the **IEEE Returning Mothers Conference 2025**. Their dedication, teamwork, and organizational support played a key role in ensuring the smooth execution of the event. Through their active involvement, they demonstrated strong leadership qualities, responsibility, and commitment to professional service. Their recognition highlights the importance of student participation in international professional platforms and reflects the department's encouragement of leadership and service among students. Their contributions not only enhanced the conference experience but also set an inspiring example for their peers, encouraging more students to engage in activities that promote personal and professional growth.



**Jeppiaar Engineering College** received recognition as an Awareness Advocate under the "Voice of Inclusion Impact" initiative at the **IEEE Returning Mothers Conference 2025**. This recognition highlights the institution's commitment to promoting inclusivity, awareness, and equal opportunities in engineering and technology. The college actively supported initiatives aimed at empowering individuals and creating a more inclusive academic and professional environment. This achievement reflects the institution's dedication to social responsibility and its role in supporting meaningful global initiatives that promote diversity and inclusion. The college's involvement in the "Voice of Inclusion Impact" initiative underscores its proactive approach to fostering an inclusive culture.



**Mr. Karthikeyan K B and Ms. Evangeline A** were recognized for their exceptional contributions as **Campus Ambassadors for Prathiyogita - Volume 2**, organized by IEEE Communications Society, Kongu Engineering College. As ambassadors, they played a vital role in promoting the event, coordinating with participants, and facilitating effective communication between students and organizers. Their leadership, dedication, and organizational skills contributed significantly to the success and outreach of the event. This recognition highlights their ability to represent their institution at a professional level and demonstrates the active involvement of ECE students in prestigious national technical platforms.



◆ **EXCELLENCE ON DISPLAY** ◆



# IEEE SHOWCASE

The IEEE Student Branch of Jeppiaar Engineering College organized the **INNOVAX 2025** Installation Ceremony on 19 August 2025 at the Elite Seminar Hall, bringing together students, faculty, and distinguished guests in an inspiring and professional environment. Chief Guest **Indhumathi G** delivered a motivating speech highlighting the importance of leadership, networking, and active IEEE participation for career growth. The installation of new office bearers marked continuity and progress, while guest speakers shared insights on innovation and real-world applications. Events like Tech Talk, Unravel, and Sci-Fi to Reality promoted creativity, collaboration, and future-ready technical excellence among students.



The IEEE Student Branch of Jeppiaar Engineering College organized the **10th International Conference on Science, Technology, Engineering and Mathematics (ICONSTEM 2025)** on 6th and 7th November 2025 in offline and hybrid modes. The conference provided a global platform for students, research scholars, and faculty to present innovative research aligned with the theme "Fusion of Intelligence and Technology in the Next-Gen."

Distinguished speakers from academia and industry shared insights on emerging technologies, digital inclusion, and sustainability. With 350 participants, the event fostered interdisciplinary collaboration, promoted research culture, and strengthened academic and professional connections at national and international levels.

**IEEE Day 2025** was celebrated by the IEEE Student Branch of Jeppiaar Engineering College on October 7 with creative events that merged innovation and artistry. The event featured two main competitions: Beat the Floor (Dance) and Scorcese (Short Film), attracting participation from various departments. **Mr. Ahamad Thowfeek B**, Founder of Combo Square, delivered an inspiring address on creativity and innovation, supported by distinguished guests like **Ms. Anuprabha D** and **Mr. Johnrose XIP**. Beat the Floor showcased dynamic dance performances, while Scorcese highlighted original short films addressing technology and social themes, promoting collaboration and creativity beyond technical boundaries.



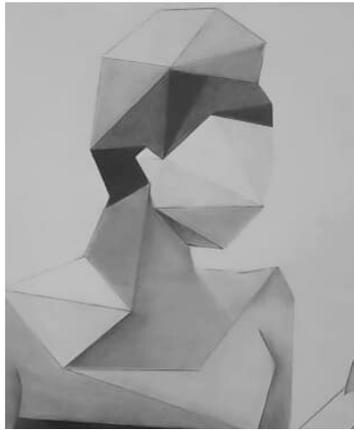
◆ **CONNECTING STUDENTS WITH GLOBAL TECHNOLOGY AND INNOVATION** ◆



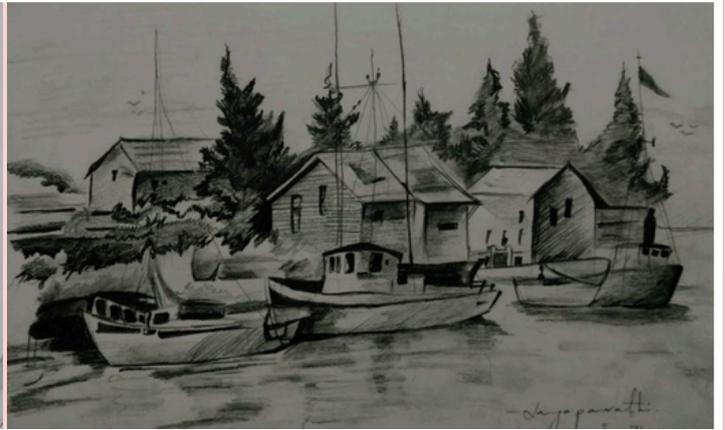
# CREATIVE EXPRESSIONS



**SHEIKHA ASLIN .A**  
ECE - B  
II YEAR (2024-2028)



**JAYAPARVATHI A**  
ECE - A II YEAR (2024-2028)



**PRAVEEN**  
ECE - B  
III YEAR  
(2023-2027)



**ANBU SUSE**  
ECE - A  
III YEAR  
(2023-2027)



◆ **SHOWCASING STUDENT EXCELLENCE** ◆



# CREATIVE EXPRESSIONS



HARIPRIYA

ECE - A

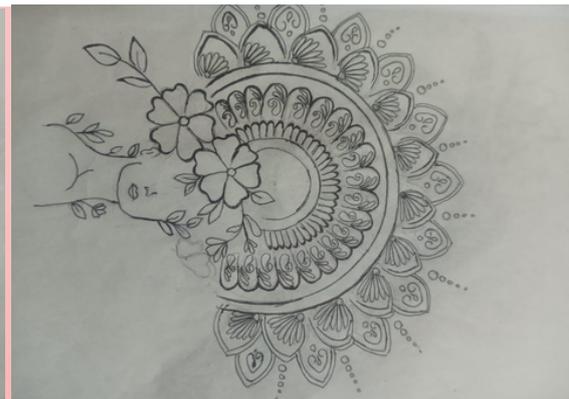
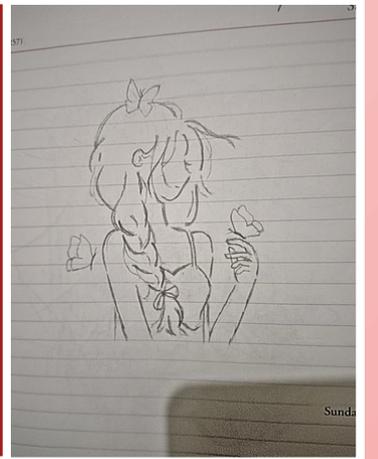
III YEAR (2023-2027)



EVANGELINE A

ECE - A

II YEAR (2024-2028)



AMIRTHAVARSHINI

ECE - A

III YEAR

(2023-2027)



குப்பைகளுக்கு தெரிவதில்லை....  
எங்கிருந்து ஆரம்பிப்பது,  
வாழ்க்கையில் அடிப்பட்டால் சரி..., மேலும் மேலும் வார்த்தையில் அடிப்படும்  
வேடிக்கையாக ஆகிவிட்டது என் நாட்கள்..... எதையும் கேட்கவில்லை,  
யாரையும் கேட்கவில்லை, இருந்தும் சிக்கல்கள்....  
என் வழியில் இருப்பதாலோ என்னவோ, என் குறைகளை அவர்களுக்கு  
சாதகமாக எண்ணி அள்ளி வீசுகிறார்கள் குப்பைகளை....!  
குப்பைகளோடு உலாவுவதால், குப்பைத்தொட்டிற்கும். குப்பை என்ற வார்த்தை  
பழி....!  
தாயின் நேயம் ஆகூழம் என்றேன் குழுவியில்...  
ஆர்கலி அளவின் ஞாலமதில் நேயத்திர்க்கா பஞ்சமென்றேன்...  
விடலையில்...  
கால சுழற்சியில் அமுகுரல் ஆரம்பித்ததே மீண்டும் உன் மடியினில் தவழ...  
அம்மா....!  
- Lochana Kennedy  
III YEAR (2023-2027)  
ECE - A

◆ EXCELLENCE ON DISPLAY ◆



# STUDENT'S LENS



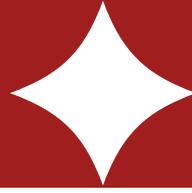
S. RUJULA SHREE  
ECE - B  
II YEAR (2024-2028)



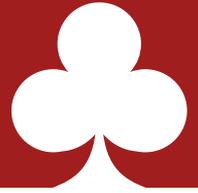
RAJARAJESHWARI  
ECE - B  
III YEAR (2023-2027)



AKSRITHA  
ECE - A  
II YEAR (2024-2028)



RAGAV  
ECE - B  
III YEAR (2023-2027)



PAVITHRA  
ECE - B  
III YEAR  
(2023-2027)



# GLIMPSE OF NEXORA 2K25



# MILESTONES OF ECE





# DECTRON 2K26



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Ms. S. Rohidha, II YEAR (2024-2028)

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