



V.S.B.
ENGINEERING COLLEGE
(AN AUTONOMOUS INSTITUTION)
KARUR
(Anna University Recognized Research Institute)

NBA
ALL ELIGIBLE COURSES
ARE ACCREDITED

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ECE NEWSLETTER

2024 - 2025

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ABOUT DEPARTMENT

The department of Electronics and Communication Engineering was started in the year 2002 with an intake of 60. In 2006, it was increased from 60 to 120 and in 2012, it was increased from 120 to 180. The department has highly educated Faculty members having a vast experience in their field. Students are given education as well as training exposure in order to get placed in highly reputed Industries. The department has well equipped Laboratories.

Symbiosis between placement cell and the Department helps the students to achieve the best of the Jobs for their careers. Proper Industrial interaction is given to the students by organizing National level workshops in the Campus. For events, eminent personalities from industry and educational institutions are invited to the campus for student's interaction and guidance. The students had presented their talents in the form of practical projects and papers, which were seen and assessed by the invited personalities; they also had an interaction directly with the students in which they suggested measures to further improve the quality of the creativity. Exposure as well as training is provided to the students for advanced studies and various guest lecturers and Mock campus interviews are conducted time to time to facilitate the students and create awareness.

Industry visits and practical projects are also encouraged by the department in various sectors; students are taken out to industries for practical understanding of the technology. The students of the department have proven the quality of education provided to them by receiving awards in National as well as International level conferences. They have also received ranks on state level in the Anna University results of engineering examinations. To add on the feathers in the cap, students are also placed in reputed companies such as Tata Consultancy services (TCS), Capgemini, Wipro, Altran, HCL, CTS, L&T Infotech, IBM, Tessolve, Infosys, SONY, Mind Tree, etc.

VISION

To produce academically excellent and socially responsible engineers in Electronics and Communication Engineering.

MISSION

- To provide good fundamental knowledge in sub-domains of Electronics and communication Engineering.
- To offer an efficient teaching learning process with a focus on problem solving skills, analytical skills and technical skills.
- To inculcate competency, innovative spirit, communication and managerial skills to create socially responsible Engineers.
- To encourage the students to pursue higher studies and research activities.

PEO'S

PE01: The Graduate of the program will be able to provide solutions to the real world Complex problem in the society.

PE02: The Graduates of the program will be able to adapt to the emerging technologies with Active participation in professional activities to build career skills for prosperous career in organization or higher studies and research.

PE03: The Graduates of the program will be able to exhibit and demonstrate leadership skills with ethical values in their profession.

PSO'S

PS01: Apply Knowledge related to core and specialized fields like Electronic circuits, Embedded and Communication Systems to Solve complex Engineering/Societal Problems.

PS02: Able to Expose Students Programming skills using latest tools to arrive cost effective and appropriate solutions.

PS03: Apply the contextual Knowledge with professional Ethics to manage different projects in multi disciplinary environment.



CHAIRMAN'S MESSAGE

SHRI V.S.BALSAMY **FOUNDER - CHAIRMAN**

Our institution stands as a beacon of knowledge and discipline, striving towards the pinnacle of educational excellence by offering world-class education of the highest quality and diversity. In a short span of time, we have become a benchmark among colleges in india, committed to meeting and exceeding the standards set by the university norms. The college management, faculty members, and staff work tirelessly with the vision of placing V.S.B. Engineering college at the forefront of the academic landscape. By providing state-of-the-art facilities and fostering an environment of continuous learning, we empower our students to achieve both academic and moral excellence. I warmly welcome all students who are determined to excel academically and uphold strong ethical values to join the V.S.B. Educational family. Together, we aim to mold graduates into world-class professionals. I also extend an open invitation to entrepreneurs and recruiters to conduct campus recruitment drives at our institution. I assure you that our students, equipped with exceptional skills and knowledge, will prove to be valuable assets to your organizations, fostering mutual growth and development.

HOD'S MESSAGE



DR.R.POORNACHANDRAN

HOD (ECE)

This past year has been unique, to say the least. Our students adapted remarkably, embracing both remote learning and hybrid models to continue their education journeys. While maintaining strong bonds between themselves, presented challenges, we persevered. I am incredibly grateful for the unwavering support of our students, faculty, parents, and alumni. This challenging time also presented unexpected opportunities. We fostered stronger virtual connections with our alumni and parents, further solidifying our department's community. This department magazine is a testament to the creativity and knowledge that thrives within our walls. As you delve into these pages, you'll discover the exceptional work of our faculty and students.

P.ANANDHAKUMAR

HOD (ECE)



It is my pleasure to lead the Department of Electronics and Communication Engineering at VSB Engineering College. We offer a B.E. (Honours) degree program in Electronics Communication, equipping students with the knowledge and skills they need for success in the ECE industry. Our department boasts a team of highly qualified, experienced, and dedicated faculty members. We foster a learning environment that emphasizes hands-on experience with current technologies and programming languages, ensuring our motivated students are well-prepared for their careers. The department consistently produces outstanding graduates who regularly achieve top positions in the university. Many of our graduates go on to work in core fields of Electronics and Communication Engineering.

RESEARCH HIGHLIGHTS

Journal Paper Publication

Dr. C. Vennila, Associate Professor/ECE

“An Effective Prediction Model of Myocardial Infarction Using Convolution Kernel Weight Based Convolutional Neural Network”

Published In: IETA

Dr.R.Poornachandran, AP/ECE

“An Approach to Ensure the Safety of Industry 4.0 Mobile Robots”

Published In: Wiley

DMs. C. Bhuvaneswari , AP/ECE

“AI-Driven Resource Allocation and Optimisation in Massive MIMO Systems for Enhanced Spectrum Efficiency”

Published In: Journal of Environmental Protection and Ecology

IEEE Paper Publications

Mr. V. Elumalai, AP/ECE

“Performance Comparison of Slotted Inverted F Tri-Band Antenna and Slotted P Tri-Band Antenna for Wi-Fi, Bimax”

Mr. R. Ashok Kumar, AP/ECE

“Advancing VLSI Routing Algorithms Through Machine Learning Techniques”

Mr. P. Anandha Kumar, AP/ECE

“Wavelet Transform-Based Enhanced Statistical Voice Conversion of Non-Audible Murmur for Improved Speech Intelligibility”

Dr.Veeraiya, AP/ECE

“5G Wireless Network Security: Investigating Next-Generation Mobile Communication Data Encryption Methods and Authentication Protocols”

Mrs. R. Lakshmi , AP/ECE

“ Sustainable Power Generation from Waste: Reducing Landfill Waste and Meeting Growing Energy Demands”

Dr. P. Gomathi , AP/ECE

“Innovative Techniques in the Construction of Very Large Scale Integration Circuits for Low-Power and High-Performance Circuits”

Mrs. B. Arthi , AP/ECE

“Adaptive Rooftop Solar System with Optical Wireless Charging for Electric Vehicle Batteries”

Patent Published

Dr. Anumol Mathai

"IoT Platform For Road Surface Analysis Using MEMS Data AI-Based Fault Detection System"

Dr. R. Surendar

"A Novel Deep Learning Algorithm For Thyroid Cancer Classification"

Dr. P. Gomathi

"PC-Based Intelligent Traffic Monitoring System With Real-Time Analysis For Smart Cities"

Dr. R. Rameshbabu

"SmartCrop Guardian: Intelligent Image-Based Protection From Wild Animal Intrusions"

Dr. B. Senthilkumar

"Application Of IoT And Cloud Computing In HOT-HMS: Main Framework For Remote Patient Monitoring And Predictive Healthcare Analytics"

V. Elumalai

"DNA-Based Data Encryption And Decryption Using Twofish Algorithm For Secure Storage"

S. Yuvarani

"Implementation Of Approximate Softmax Function For Neural Network"

V. Jamuna

"ARV-Net: Attention-Residual V-Net For Foetal Cardiac Rhabdomyoma Segmentation In Echocardiography"

K. Maheshkumar

"Railway Train Collision Avoidance On Same Track And Animal Detection Using AI-IoT"

Uthradevi

"Design And Implementation Of Low-Power Multiplier Less FIR Filters For Real-Time Applications"

R.R. Jegan

"Optimized Noise Reduction In Dual-Channel Double-Gate HEMT For THz Applications"

Malarvizhi T

"Low Power And Low Latency Hardware Implementation Of Approximate Hyperbolic And Exponential Function For Embedded System Application"

Ashok Kumar R

"RL&DQN-Based Clustering And Routing For Wearable IoT Enabled Wireless Body Area Network"

Bhuvaneshwari C

"Alexa-Based Home Automation For Car Parking"

Kalaichelvi K

"Advanced Fishermen Communication And Location Tracking Over Wireless Water Networks"

Mohanavel G

"An Enhanced IoT Based Assistance System For Alzheimer's Disease"

Anandha Kumar P

"First Order Features Extraction From Thermal Imaging For Human State Recognition Based On FACAET Algorithm"

Dr. P.S. Gomathi

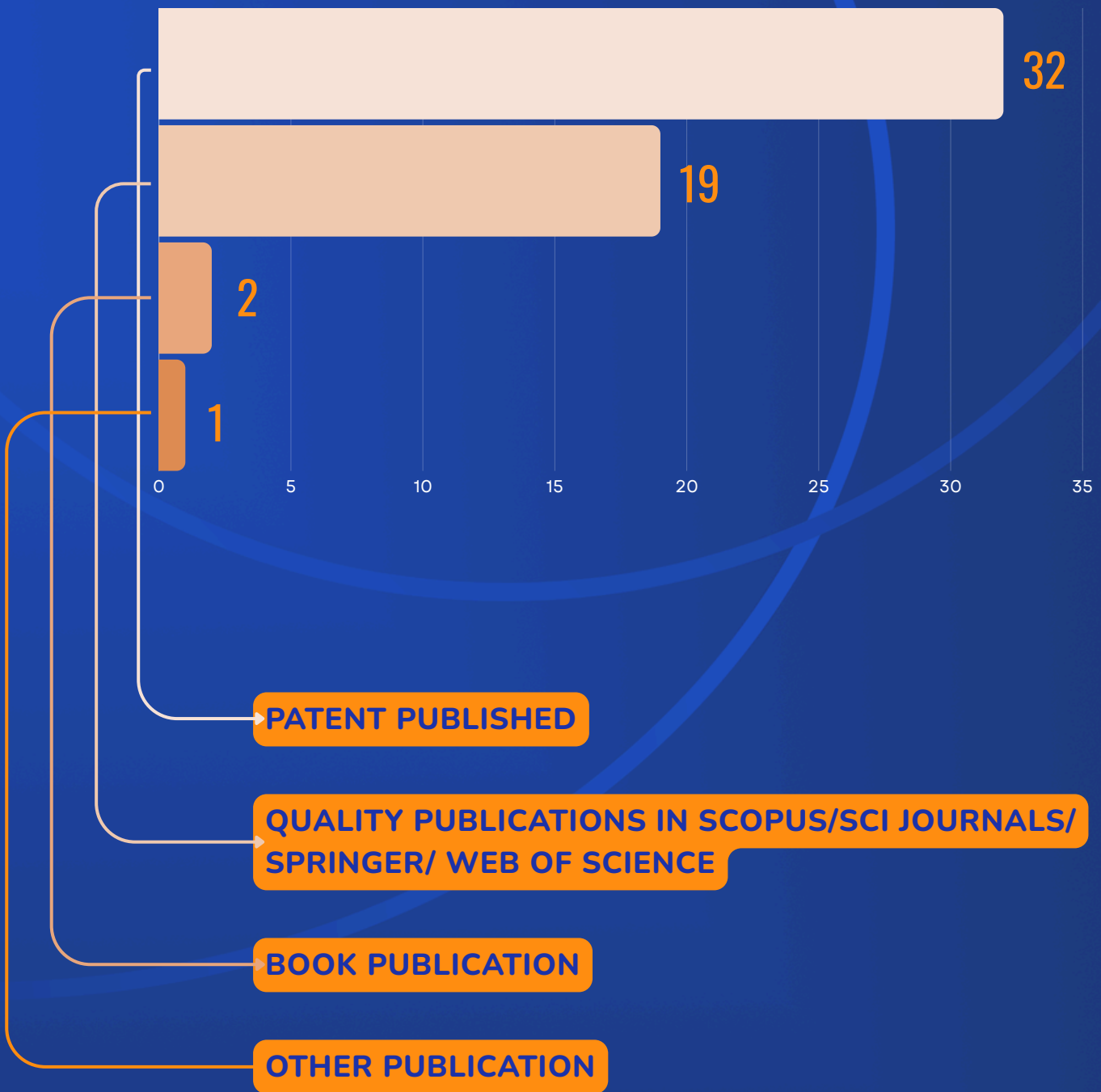
"A Low-Power Adder Tree For Digital Computing-In-Memory By Sparsity And Approximate Circuits Co-Design"

Mohammed Younus

"Wireless Evolution: Analyzing Peak Downlink Rates From 4G To Next Gen THz Systems"

Dr. Veeraiah

"Renewable Energy Integration Using Cloud & IoT Based Smart Agriculture"

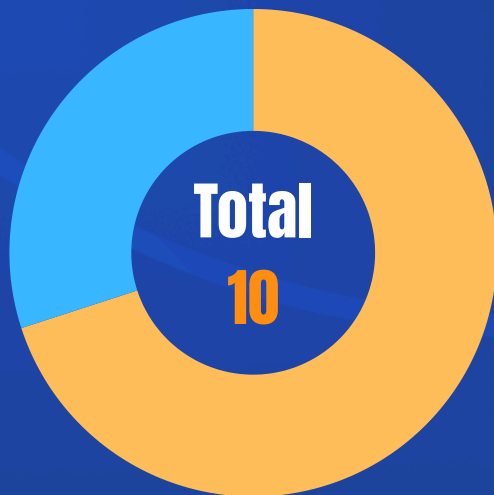


The ECE Department takes great pride in the remarkable research accomplishments of our esteemed faculty members this academic year. Your scholarly contributions have significantly advanced our department's intellectual footprint across multiple domains.

These achievements exemplify our faculty's dedication to pushing the boundaries of knowledge and fostering academic excellence.

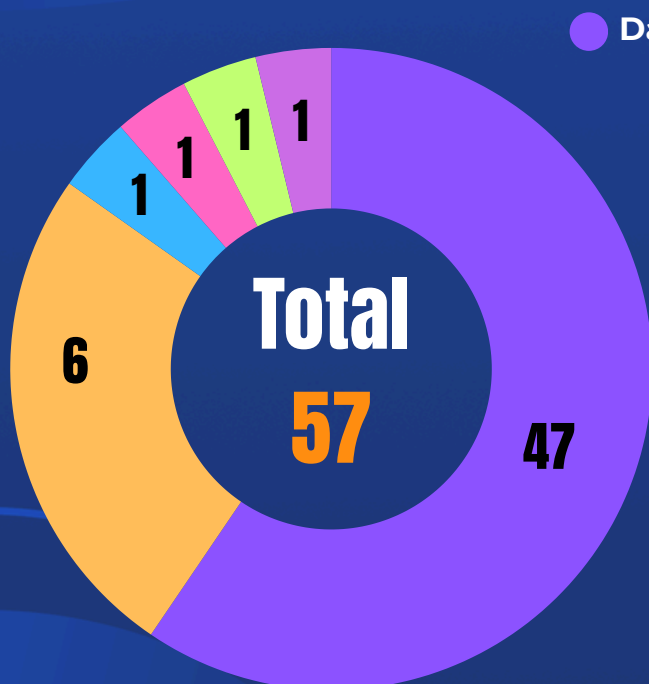
NPTEL CERTIFICATIONS

FACULTY



- NBA Accreditation and Teaching and Learning in Engineering
- VLSI for Beginners

STUDENTS



- Data Analytics with Python
- Programming in Java
- Embedded System Design with ARM
- Introduction to Internet of Things
- Data Base Management System
- Digital Circuits

TECHNICAL EVENTS



IDEATHON 2K24

The Department of Electronics and Communication Engineering successfully hosted "IDEATHON 2K24" on Thursday, September 26, 2024, at the Seminar Hall. The event brought together students from various departments, creating a vibrant platform for brainstorming, collaboration, and innovation. Participants showcased their exceptional creativity and problem-solving abilities as they tackled real-world challenges with groundbreaking ideas.

LIRO 2K24

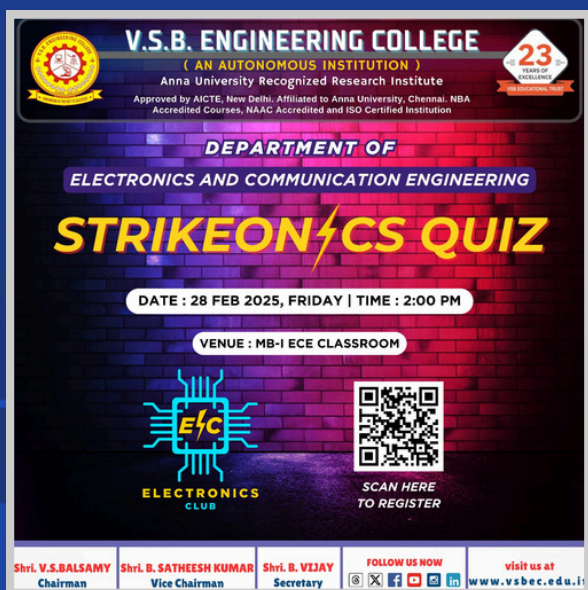
The Department of Electronics and Communication Engineering proudly hosted the Line Follower Robot Competition - "LiRo 2K24" on October 26th, 2024, at the Dr. V.C.K Auditorium, VSBEK. The event, held from 10:30 AM to 2:00 PM, brought together passionate robotics enthusiasts eager to showcase their robotic genius and compete for the top spot. It was an electrifying atmosphere as participants demonstrated their innovative designs, precision programming, and problem-solving skills.





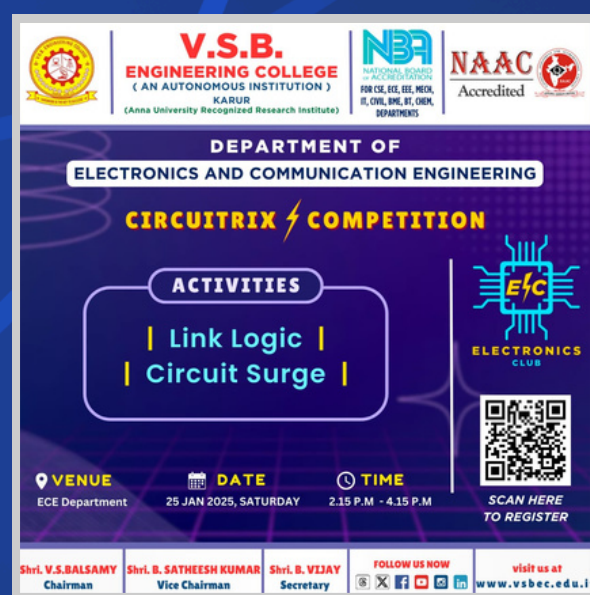
CIRCUITRIX COMPETITION

The Department of Electronics and Communication Engineering (ECE) at V.S.B. Engineering College, Karur, organized "Circuitrix Competition" on 25th January 2025, under the Electronics Club. The event aimed to engage students in hands-on circuit design and problem-solving challenges. The competition featured two exciting activities – Link Logic, focused on logical reasoning, and Circuit Surge, centered on practical circuit execution. Students participated with great enthusiasm, showcasing innovation, teamwork, and technical skills throughout the event.



SHARK TANK 2K24

The Department of Electronics and Communication Engineering (ECE) at V.S.B. Engineering College, Karur, hosted the thrilling Shark Tank Competition 2024 on 19th November 2024, at the Seminar Hall, as a prelude to National Entrepreneurship Day. The event brought together some of the brightest student entrepreneurs, who showcased their innovative startup ideas to a panel of esteemed judges. With creativity, confidence, and entrepreneurial spirit on full display, the participants left the audience and judges impressed with their groundbreaking ideas and business strategies.



SHARK TANK 2K24

The Department of Electronics and Communication Engineering (ECE) at V.S.B. Engineering College, Karur, organized "Strikeonics Quiz 2025" on 28th February 2025 (Friday) under the banner of the Electronics Club. The event was designed to ignite curiosity and test the technical knowledge of budding engineers in the field of Electronics and Communication. The quiz brought together enthusiastic participants who competed in a dynamic and intellectually stimulating environment. With challenging questions and engaging rounds, the event fostered healthy competition while enhancing the students' understanding of core concepts in ECE.

ACHIEVEMENTS



Participated



27%
Girls



73%
Boys



1st PLACE



2nd PLACE



3rd PLACE



BEST
PERFORMER

This year's achievements highlight our students' exceptional technical proficiency, innovative thinking, and commitment to excellence. We extend our heartfelt congratulations to all participants and winners who have proudly represented V.S.B. Engineering College at these prestigious forums.

These successes reflect the department's dedication to nurturing talent and fostering academic growth. We commend our students for their hard work and look forward to continued excellence in the coming academic year.



Hearty congratulations to Mr. Deepak P of II ECE for securing 1st Prize in the Paper Presentation at ADDICT 2K25, organized by P.A. College of Engineering and Technology, Pollachi, on 27th February 2025. He was awarded a cash prize of ₹1000 for his outstanding performance and presentation.

Hearty congratulations to Mr. V. Siranjeevi Kumar and Mr. V. Yuvaraj of II ECE for winning the 1st Prize in the Paper Presentation at PRATHIYOGITHA 2K25, organized by Kongu Engineering College, Perundurai, Erode, on 11th April 2025. The team was awarded a cash prize of ₹1000 for their remarkable achievement.





Hearty congratulations to Ms. S. Hemamalini and Ms. S. Dharani of II ECE for securing the 1st Prize in the Paper Presentation at Selvam Scilish 2K25, organized by Selvam College of Technology, Namakkal, on 17th April 2025. Their excellent presentation and innovative ideas earned them well-deserved recognition at the event, bringing pride to the Department of ECE.

Hearty congratulations to Ms. D.M. Dharshini Sree, Ms. K. Archana, and Ms. K. Dhivya of II ECE for winning the 2nd Prize in the Paper Presentation at AVENTURO 2K25, organized by Kongu Engineering College, Perundurai, Erode, on 5th March 2025. The team was awarded a cash prize of ₹500. We wish them continued success in their academic journey.



Hearty congratulations to Ms. S. Girinandini, Ms. D. Dharshini, and Ms. M.G. Harinitha of II ECE for securing the 2nd Prize in the Paper Presentation at AVENTURO 2K25, organized by Kongu Engineering College, Perundurai, Erode, on 5th March 2025. The team received a cash prize of ₹800 for their commendable performance.

Hearty congratulations to Ms. S. Bharathi and Ms. P. Haritha of II ECE for winning the 3rd Prize in the Paper Presentation at AVENTURO 2K25, organized by Kongu Engineering College, Perundurai, Erode, on 5th March 2025. They were awarded a cash prize of ₹500 for their commendable performance. The Department of ECE wishes them continued success in all future endeavors.

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FOR CSE, ECE, EEE, MEC, IT, CIVIL, BME, BT, CHEM DEPARTMENTS

NAAC
Accredited

DEPARTMENT OF ECE

Hearty Congratulations to the winner in
AVENTURO 2K25

For winning 3rd prize in the Paper Presentation organized by Kongu Engineering College, Perundurai, Erode. Dated on 05.03.2025

**Ms. S Bharathi - II ECE
Ms. P Haritha - II ECE**

CASH PRIZE ₹500/-

3rd

We wish you all the best in your future endeavors.

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DEPARTMENT OF ECE

Mr. Deepak P, Mr. Harish R - II ECE

Hearty Congratulations to the winner in
ORACLE 2K25

For winning Overall Best Performers in the Paper Presentation organized by Government College of Technology, Coimbatore. Dated on 27.03.2025

We wish you all the best in your future endeavors.

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Hearty congratulations to Mr. Deepak P and Mr. Harish R of II ECE for being recognized as Overall Best Performers in the Paper Presentation at ORACLE 2K25, organized by the Government College of Technology, Coimbatore, on 27th March 2025. Their outstanding performance and technical excellence brought great pride to the Department of ECE.

EDITORIAL TEAM

JASWANTH A

II YEAR ECE

SANJAY B

II YEAR ECE

SANJAI S

III YEAR ECE