



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

PERUNDURAI , ERODE - 638057



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

magazine



MAR - APR(2026)

ABOUT THE DEPARTMENT

The Department of Electronics and Communication Engineering was started in the year of 2000. It offers UG Programme (B.E.) in Electronics and Communication Engineering and PG Programme (M.E.) in Applied Electronics. The Department has also been recognized as a centre for carrying out Ph.D. Programme under Anna University. It has good infrastructural facilities with well- experienced and dedicated team of faculty members. The Department has signed MoU with various companies and has collaboration in Research & Development / Student Projects Consultancy works. The Department organizes National level Students' Technical Symposia and Project Exhibition every year.

VISION

To impart professional excellence, leadership qualities and competence, embedded with character in students and serve the society through research.

MISSION

- Create Learning Environment to serve the societal needs.
- Provide high quality ethical engineers for the Benefit of the Society.
- Impart State of art Technical Education to groom engineers with high professional standards.
- Promote innovative ideas and augment research to improve the quality of life through application of technology.



ABOUT THE DEPARTMENT

Programme Educational Objectives (PEOs)

- Impart the learners, an ability to understand and analytical, academic use and communication skills effectively with special emphasis to fulfill societal needs.
- Inspire the beginners to enrich their skills throughout career by learning about emerging technologies, adapting and accepting the changes to achieve leadership position in industry or academia.
- Prepare graduates to innovate products/solutions through research to real life problems for boosting the economy of the region and the nation.
- Prepare graduates to work effectively as a team and practice ethics in the profession
- with a sense of social responsibility.

Program Specific Outcomes (PSO)

- PSO 1: Interpretation Skills: Acquire skills to design, verify and validate electronic functional elements for a variety of applications.
- PSO 2: Core Competences: Ability to use hardware and software tools to solve complex problems in VLSI, Communication, RF and Embedded Systems.
- PSO 3: Attitude: Develop an attitude of lifelong learning for sustained career advancement and adapt to the changing multidisciplinary profession.





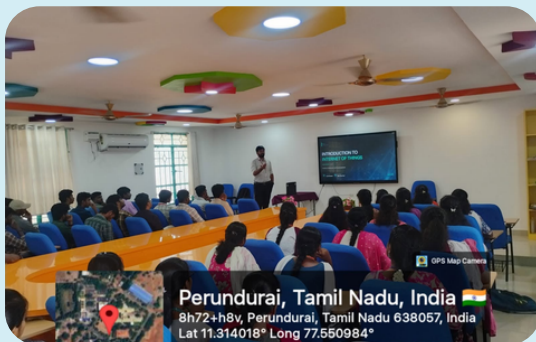
Program Outcomes(PO)

- 1.Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2.Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 3.Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- 4.Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- 5.Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- 6.The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- 7.Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- 8.Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9.Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10.Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- 11.Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- 12.Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Courses Offered: B.E. Electronics and Communication Engineering
(4 Years), M.E. Applied Electronics (2 YEARS) & Ph.D (3 Years)

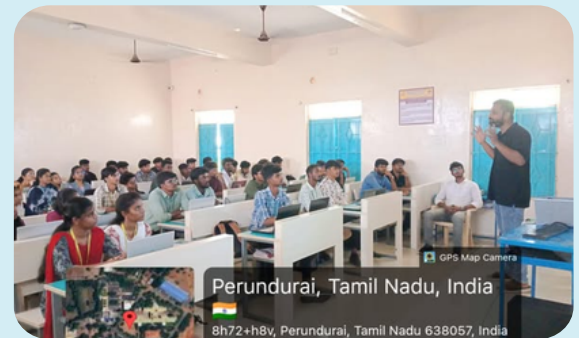
DEPARTMENT EVENTS

As part of its extension activities, the Department of Electronics and Communication Engineering organized the GLOW Project – "Guiding Little Ones towards Wellness" on 05 March 2026 at Diamond Jubilee Primary School. Girl students of III and IV Year ECE conducted interactive sessions to create awareness among school children about health, hygiene, and nutrition through engaging activities, informative sessions, and healthy snack distribution. The initiative reflected the department's commitment to community service and promoting healthy lifestyle practices among young learners.



An ANRF Sponsored National-Level Workshop on "IoT-Based Intelligent Decision-Making Systems Using AI, Edge Computing & Real-Time Data Analytics for Smart and Sustainable Applications" was conducted from 09–13 March 2026. The workshop provided participants with hands-on training and valuable insights into emerging technologies, including the Internet of Things (IoT), Artificial Intelligence, Edge Computing, and Real-Time Data Analytics. The program enhanced technical knowledge and promoted innovative approaches to developing smart and sustainable solutions.

A seminar on "Visual Effects Mastery: Transforming Beginners into Professionals" was conducted on 11 March 2026. The session introduced students to the fundamentals of Visual Effects (VFX), creative design techniques, and career opportunities in the digital media industry. Through expert guidance and interactive discussions, participants gained valuable insights into professional tools, industry practices, and the skills required to excel in the field of visual effects.



A Two-Day Workshop on "PCB Design and Fabrication" was conducted on 17–18 March 2026 under WHIZZCOM. The workshop provided students with practical exposure to PCB design, layout, and fabrication techniques through interactive sessions and hands-on training. Participants gained valuable insights into electronic circuit design tools and industry-oriented hardware development, enhancing their practical skills in modern electronics.

DEPARTMENT EVENTS

As part of its extension activities, the Department of Electronics and Communication Engineering organized a community outreach program at Nallur Government School, Tiruppur. III Year ECE students, along with Ms. S. V. Saveeithaa and Ms. S. Vidhya, Assistant Professors, conducted a tree plantation drive, an awareness session on responsible mobile phone usage, and a series of interactive activities for school students. The initiative promoted environmental conservation, digital awareness, and social responsibility while strengthening the department's commitment to community engagement.



The Department of Electronics and Communication Engineering, in association with the Department of Artificial Intelligence and Data Science, organized a One-Day National Conference on "Convergence of Electronics, Communication and Artificial Intelligence for Smart Applications" on 07 April 2026. The conference provided a platform for researchers, academicians, industry professionals, and students to present innovative research and exchange ideas in emerging technologies. The event promoted interdisciplinary collaboration and encouraged research excellence in smart and sustainable applications.



As part of the Microprocessor and Microcontroller course, 60 second-year ECE students (Section B) visited Sakthi Sugars, Sakthi Nagar, Erode District, on 08 April 2026. The industrial visit provided valuable exposure to industrial operations and the practical applications of microcontrollers in automation and process control. It enabled students to bridge the gap between classroom learning and real-world industrial practices, enriching their technical knowledge and practical understanding.



As part of the Microprocessor and Microcontroller course, 60 second-year ECE students (Section A) visited Milky Mist, Erode, on 09 April 2026. The visit provided valuable insights into industrial automation and the real-time applications of microcontrollers and processors in modern production systems. It enabled students to relate theoretical concepts with practical industrial practices, enhancing their technical knowledge and understanding of automation technologies.

DEPARTMENT EVENTS

The Department of Electronics and Communication Engineering, in association with the Students' Association – WHIZZCOM, conducted a Two-Day Hands-on Workshop on "PCB Design and Fabrication" on 16–17 April 2026. The workshop provided students with practical experience in PCB design, fabrication techniques, and electronic circuit development. Through interactive hands-on sessions, participants enhanced their technical skills and gained valuable industry-oriented knowledge in hardware design and implementation.



A Five-Day National-Level Workshop on "Hybrid Quantum-AI for Drug Discovery and Molecular Property Prediction with Antiviral Drug Development using Google Quantum AI" was conducted from 27 April to 01 May 2026. Organized by the Departments of Biomedical Engineering and Computer Science & Design, the workshop introduced participants to the applications of Quantum Computing and Artificial Intelligence in healthcare and drug discovery. The sessions provided hands-on learning, expert insights, and practical exposure to emerging technologies, enhancing participants' knowledge of innovative solutions in biomedical research.

FACULTY PARTICIPATIONS

CONFERENCE

Dr. G. Satheeshkumar presented a research paper titled "Chaotic Mountain Gazelle-Optimized ANFIS Controller for Efficient Energy Distribution in Hybrid Power-Driven BLDC Motor Electric Scooters" at the IEEE International Conference on Intelligent Sustainable Future Technologies (ICSFT 2026) on 24 April 2026. The paper's acceptance highlights his research excellence and the department's continued commitment to innovation and academic advancement.

STUDENT PARTICIPATION

TECHNICAL EVENTS

A large contingent of students from the department, including Meiyarasu.S, Sarathy.R, Selvagani.S, Lakshana.V, Nadhin.S, Dineesh Kumar.K.S, Nikkileshkumar.G, Kajal Kumari, Kanimozhi.P, Mangayarkarasi.N, Shanmugapriya.K, Kanish.B, Ragul.A, Ramya Devi.T, Haritha.M, Ishwarya.S, Poovarasan.R, Charunethra.A.B, Tamilarasan.M, Nishant.G, Daniel Vibin.C, Bavithra.S, Harivarsan.S.B, Sridhar.E, Jothi Sri.M, Kaviya.E, Sivaneshwaran.G, Haritta.N, Janarthanan.M, Kishore.T, Girisudhan.K, Sandhiya.K, Mohanapriya.K, Vigneshwaran.A, Thirisha.R, Sathya.K, Malarvizhi.S, Rohith.G, Pradeepan.M, Praveen.S, Madhesh.M, Yogeshwaran.T, Vishnu Priyan.K, Indhuja.S, Gowsi.T.S, Kanishka.M, Jejo Andrewraj.J, Dhilipan.R, Kasi Viswanathanram.B, Dinesh.R, Kathirvel.V, Kavin.P.S, Adithiya.S.S, Priyadharshini.R, Bharath.R, Chandeesh.M, Afrar Ahamed.M, Devigarani.B.S, Gowtham Prasanth.S, Annamalai.C, Vaseem Ahamed.A, Sri Rekha.M, Ganeshwaran.C, Jamuna.G.K, Iswarya.I, Keerthana.G, Gopika.A, Praveena.S, Jagan.S, Selvasezhiyan.R, Venkatesh.A, Abilesh.K, Rithun Rohit.J, Vijay.M, Aravindhan.V, Vikas Karthick.N, Lingeshwaran.P, Dhinesh.K, Jagath.V, Ajay.V, Dhanush.G, Murali.R, Mouli.K.D.V, Pragadeeshwaran Senthilkumar, Tamil Selvan.S, Jothiraja.M, Rabini Prem, Sathish.R, Sasikumar.V, Ammu.V, Sivabalaji.T, Dharshini.E, Dinesh.P, Franklin Joyson.S, Naveena.P, Samithaa.J.K, Sasikala.P, Shylaja.P, Pirajin.P, Dharanidharan.D, Manjith.P, Nivetha Sri.E, Keerthana.R, Karisni.C.S, Deveswar.K, Vedha Harshini.K, Ranjani.S, Santhosh.T, Mohamed Jubair.S, Pugalenthii.M, Vairavel.S, Rubashree.A.S, Selvakumar.S, Dhanaagarsan.J.P, Someshwar.N, Kanakaveni.M, Keerthana.P, Kalaivani.M, and Nandhita.M participated in the National Level Financial Literacy Quiz organized by SEBI on April 16, 2026.

Vaseem Ahamed.A, Nishant.G, Vairavel.S, and Bavithra.S represented the department by participating in the National-Level Technical Quiz conducted by Shree Venkateshwara College on March 13, 2026. Vairavel.S and Bavithra.S secured Second Prize, showcasing their analytical thinking and technical knowledge.

Kanimozhi.P and Jothi Sri.M represented the department in the National-Level Paper Presentation organized by Shree Venkateshwara College on March 13, 2026, demonstrating strong research orientation and presentation skills.

STUDENT PARTICIPATIONS

Rubashree.A.S, Vedha Harshini.K, Murali.R, Meiyarasu.S, Priyadharshini.R, Shylaja.P, Nivetha Sri.E, and Thirumurugan.S represented the department by participating in VYASA 2K26, a National-Level Event on March 6, 2026, gaining practical technical exposure.

Sivaneshwaran.G participated in the National-Level Frenzy Quiz organized by Coimbatore Institute of Technology on March 7, 2026. Ramya Devi.T represented the department in the National-Level Tech Quiz organized by Sri Ramakrishna College on March 13, 2026, while Ramya Devi.S participated in the National-Level Paper Presentation organized by Kongu Engineering College on March 1, 2026

Ramya Devi.T represented the department in ROBOTHON'2K26, a National-Level Event hosted by Sri Ramakrishna Institute of Technology on April 13 & 14, 2026.

Daniel Vibin.C and Jothi Sri.M completed Internship Training organized by the Airport Authority of India from April 6 to April 10, 2026.

PAPER PRESENTATION

Ishwarya.S, Bavithra.S, Kaviya.E, Nishanth.G, Karisini.C.S, Nivetha Sri.E, Prem Kumar.T, Lakshana.V, Vaseem Ahamed.A, Keerthan.R, Jothi Sri.M, Kanimozhi.P, Vairavel.S, and Shaffiya Parveen.S represented the department by participating in the National-Level Paper and Poster Presentation Competition organized by Shree Venkateshwara Engineering College on March 13, 2026. Their presentations covered innovative domains such as EV wireless charging, Li-Fi technology, underground cable detection, algae-powered data centers, and IoT-based monitoring systems.

Sivaneshwaran.G and Sirekha.M participated in National-Level Paper Presentations organized by Velammal Institute of Technology (March 13, 2026) and Adithya Institute of Technology (March 14, 2026), respectively, reflecting research aptitude and academic excellence.

Jeevanandham.P, Adhithyavardhan R, Arulvarshan.P, and Dharshan.L participated in the National-Level Presentation on "Smart Greenhouse with Climate Control and Plant Disease Detection" organized by Tirunelveli Dhakshina Mara Nadar Sangam College during March 2026.

Adhithyavardhan R, Dharshan.L, Jeevanantham.S, and Arulvarshan.P represented the department in the National-Level Event on Smart Greenhouse technology organized by Bannari Amman Institute of Technology on March 24, 2026.

Nandhini.R and Sabitha.M participated in the National-Level Paper Presentation Competition organized by Muthayammal College of Engineering on March 28, 2026, strengthening their technical and presentation expertise.

Keerthana.N, Harithra.K, Dhanuja Shri.B, and Kalaimathi.S presented a paper titled "AI and Big Data in Biomedical Engineering" at Chennai Institute of Technology on April 26, 2026.

Munirathnam.S and Narayanan.E presented their research on "Smart Hostel Leave and Gate Pass System with QR-Based Authentication," while Harini.G, Deepika.B, Hemalatha.S, and Gowri.T presented their work on "IoT System for Real-Time Power Theft Detection and Prevention in Smart Grids" at PSN College of Engineering on April 11, 2026.

STUDENT PARTICIPATIONS

Dinesh.M and Karthikeyan.S presented their paper titled "IoT Enabled ATM Security System with Machine Learning" at Rohini College of Engineering and Technology on April 8 & 10, 2026.

Robertkirsteeworsop.C presented a paper on "High Performance 64-bit ALU for GPU using DSHA," while Sanjay.S, Yashwanth Kumar.A, Nishanth.M, and Rohinth.M presented "Integrated Edge and AI/ML IoT Node" at Jayaraj Annapackiyam College on April 8, 2026.

Hemaniverthane.C.R, Karthiga.M, and Andrix Vinusha.G presented their work titled "Digital Twin of Embedded System using Real-Time Sensor Mirroring" published through the International Journal of Creative and Open Research in Engineering and Management on April 4, 2026.

Ramya Devi.T participated in the National-Level Paper Presentation organized by Ramakrishna Engineering College on April 13 & 14, 2026.

WORKSHOP

Sasikumar.V, Sasikala.P, Rabini.P, Kumaran.R, Kavi Prasad.M, and Meiyarasu.S participated in the National-Level Workshop on "Fourier Transform Based Signal System" conducted by ESEC on April 9 & 10, 2026.

Sasikumar.V, Sathish.R, Jothi Sri.M, Kanimozhi.P, Mangayarkarasi.N, Annamalai.C, Girisudhan.K, Kanishka.M, Mouli.K.D.V, and Meiyarasu.S actively participated in various technical webinars hosted by Vijay Technocraft covering Cyber Security, Cloud Computing, and IoT during April 8-10, 2026.

Shanmugapriya.K participated in the AI and Tech Webinar organized by Quantum Hub on April 12, 2026.

EDITORIAL TEAM



Ms.V.SAVIEETHA, AP/ECE
Coordinator

Grateful to have been part of the Magazine creation.
My appreciation goes out to the incredible team
whose dedication made it possible.

DR.S.BHARATHIDASAN
HOD/ECE



Proud to have been part of the magazine's creation.
My heartfelt appreciation to the dedicated team
whose hard work and creativity made this
achievement possible.



ESAKIGANESHAN R
- CONTENT WRITER

BHARANIDHARAN R
- EDITOR



THANK YOU