



TECH HERTZ'22

NEWS LETTER

JUN 2022 - AUG 2022



**DEPARTMENT OF
Electronics and Communication
Engineering**

ABOUT



**J.N.N INSTITUTE OF
ENGINEERING**

AUTONOMOUS

NAAC 'A' Grade | Approved by AICTE | Affiliated to Anna University

- J.N.N Institute of Engineering has been at the forefront of imparting high-quality technical education in the state of Tamil Nadu. With state-of-the-art infrastructure in all branches of engineering, dedicated and qualified staff, a highly conducive environment for the teaching-learning process, and a lush green campus, J.N.N stands out as a professionally managed institution. The institute has consistently produced outstanding engineers who have excelled in their careers, occupying responsible positions in some of the best-known enterprises in India.
- Promoted by the Alamelu Ammaal Educational Trust, formed in memory of the Chairman's mother, J.N.N Institute of Engineering is located just 25 km away from the city of Chennai. It has well-connected routes frequented by city buses, making it accessible for students, staff members, the community, and visitors who enjoy the aesthetic view of the college with its green color shades.
- The institution provides university-level education through a wider and dynamic network, catering to the demands of both university-level education and the economic development of the region, with wider opportunities. The location and range of academic offerings at both UG and PG levels have lifted the intake capacity regionally and nationally. The infrastructural development also portrays enrollment growth.
- J.N.N strives to impart high patterns of discipline with futuristic techniques through dedicated staff members. It is a place for making students technologically superior and ethically strong. The environmentally friendly place of opportunities enhances skills and personal development. J.N.N has also signed Memorandums of Understanding with top-level industries and training providers to develop new skills and abilities.



VISION

- Cultivating innovative and entrepreneurial Electronics and Communication Engineering graduates to ethically address global challenges through quality teaching and learning practices.

MISSION

- To facilitate a state-of-the-art teaching-learning process, imparting comprehensive knowledge in electronics and communication engineering and related interdisciplinary areas.
- To foster a sense of curiosity, critical thinking and ethical practices in students, preparing them for a continuous learning.
- To instill innovative team work and industry collaboration for enhancing entrepreneurial skills, employability and research capabilities in graduates.

PROGRAMME OUTCOMES

PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: 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.

PO3: 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.

PO4: 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.

PO5: 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.

PO6: 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.

PO7: 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.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: 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.

PO11: 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.

PO12: 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.

PROGRAMME EDUCATIONAL OBJECTIVES (PEO'S)

PEO1: Our graduates will have skills to become successful in academics, industries, or as entrepreneurs.

PEO2: Our graduates with a research inclination will be solving various complex social issues using advanced tools and technologies.

PEO3: Our graduates will practice engineering with ethics, human values, and environmental consciousness.

PROGRAMME SPECIFIC OBJECTIVES (PSO)

PSO1: Analyse and develop solutions in domains like IOT, Embedded, VLSI and other emerging technologies.

PSO2: Understand and architect wired and wireless analog and digital communication systems and products

LEADERSHIPS

CHAIRMAN



Shri. S. Jayachandran B.Sc., B.L
Founder & Chairman,
J.N.N Group of Institution,

We are committed in opening up high quality tertiary education to students and to provide opportunity to acquire, understand and apply disciplinary and inter-disciplinary knowledge as well as related skills and attitudes, to think rationally and to enhance their personal development. Situated in the capital city of Tamil Nadu, our college bridges the education and values in its relationship with business, government, research organizations and universities. I would like to reaffirm my sincere personal commitment to help each of you to succeed your academic endeavours. I would like to reaffirm our sincere personal commitment to help each to succeed in your academic endeavours. I heartily welcome our students and wish them the very best for a successful and glorious future.

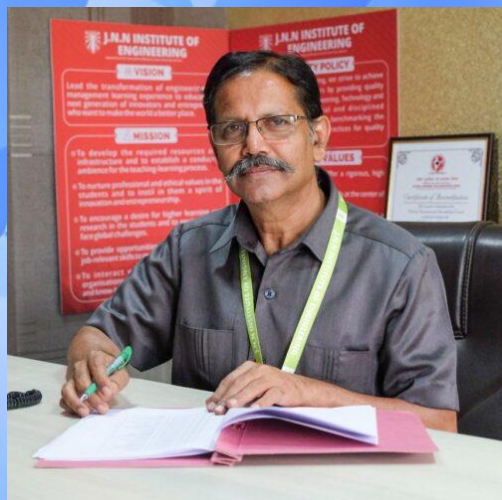
VICE CHAIRMAN



Mr. Naveen Jayachandran
Vice-Chairman,
J.N.N Group of Institutions.

Our motto, “Learning Today. Leading Tomorrow”, permeates every aspect and activity at J.N.N. Over the past 12 years, J.N.N Institute of Engineering has successfully imbibed several of the proven best practices from the best of engineering institutions around the world, adapted them to make them better suited to the ground realities and introduced many of its own innovations in engineering education. Together, these have ensured that an educational experience at J.N.N Institute of Engineering is truly transformational for thousands of aspiring young J.N.N Institute of Engineering. has been very proactive in recognising the global and national trends in shifts in the technical landscape and has been pioneering several innovations in technical education. J.N.N is also embracing the latest technologies, teaching methodologies, well equipped facilities and understands the aspirations of the student community.

PRINCIPAL



Dr. K. Ganesan

At J.N.N Institute of Engineering, we believe in providing the best learning experience through an experiential learning process that has been devised and drawn up by the management, faculty members, and administrators together. We have a common purpose mindset and language that permeates throughout the whole institution, and we are guided by four key principles:

- (i) Assure the best learning outcomes through strategic planning.
- (ii) Create seamless service through engineered operational quality.

(iii) Build a strong relationship among the stake holders.

(iv) Delight the stakeholders with personalized care of service quality.

We are delighted to offer our services to prospective students and other stakeholders. The management, faculty members, and staff are committed to contributing significantly to the growth and support of our students to help them reach the zenith of their prospective professional career and personal life. We are always here to address your queries and provide you with the best education possible.

HEAD OF THE DEPARTMENT



Dr. D. Joseph Jeyakumar

HOD OF ECE DEPT.

Dear Students, Faculty, and Readers, It is my pleasure to share updates and achievements from the Department of Electronics and Communication Engineering (ECE). Our Department continues to uphold its commitment to academic excellence, innovative research, and fostering a vibrant learning environment. Thank you for your continuous support and enthusiasm together, we can achieve greater heights

"INNOVATION IS THE ABILITY TO SEE THE CHANGE AS AN OPPORTUNITY – NOT A THREAT"

-STEVE JOBS

LIST OF FACULTY

S.NO	NAME OF THE FACULTY	QUALIFICATON	DESIGNATION
1.	Dr. D. Joseph Jeyakumar	M.E, Ph.D	Professor
2.	Mr. U. Siddharth Nambi	M.E	Associate Professor
3.	Mrs. N. Revathy	M.E	Associate Professor
4.	Dr. R. Senthil Rama	M.E, Ph.D	Associate Professor
5.	Dr. N. Hemalatha	M.E, Ph.D	Associate Professor
6.	Mrs. R. Nithya	M.E	Assistant Professor
7.	Mr. M. Mariselvam	M.E	Assistant Professor
8.	Mr. R. Partheepan	M.E	Assistant Professor
9.	Mrs. N. Malathy	M.E	Assistant Professor
10.	Mr. S. Tamilvanan	M.TECH	Assistant Professor

S.NO	NAME OF THE FACULTY	QUALIFICATON	DESIGNATION
11.	Ms. B. Shanmathi	M.E	Assistant Professor
12.	Mrs. P.B. Smitha	M.E	Assistant Professor
13.	Mrs. R. Rajarajeswari	M.E	Assistant Professor
14.	Dr. J. Vijay Anand	M.TECH, Ph.D	Associate Professor
15.	Mr. K.T. Pannerselvam	M.E	Assistant Professor
16.	Mrs. T. Indhumathi	M.E	Assistant Professor

Upcoming and Recent Events at ECE Department

Guest Lectures:



1. Dr. M.P. Jeyaraman - Power Spectral Density Functions & Random Processes

On **25th August 2022**, the ECE students had the privilege of attending an insightful lecture by **Dr. M.P. Jeyaraman**, Professor, Department of Mathematics, L N Govt College, Ponneri. The focus was on **Power Spectral Density Functions**, and the concepts of **Causal and Non-Causal Systems**. Dr. Jeyaraman also explored topics on **Random Processes** and **Linear Algebra**, enriching the students' understanding of these vital subjects in

electrical and communication engineering.

2. Dr. Gopiram - RF Filter Design

On the same day, **Dr. Gopiram**, Associate Professor at **NIT Warangal**, took a session on the design of **Various RF Filters**. Students learned about **Transmission Lines** and **RF Systems**, gaining valuable knowledge of the practical aspects of RF filter design, which is crucial in modern communication systems.

3. Dr. P. Kumar - Advanced Sensors and Wireless Sensor Networks

Also on **25th August 2022**, the ECE students were exposed to advanced concepts by **Dr. P. Kumar**, Professor, Department of ECE, **K.S. Rangasamy**

College of Technology, Thiruchengode. The lecture delved into **IC-Level Advanced Sensors** and their working principles. Additionally, the discussion on **Ad Hoc and Wireless Sensor Networks** helped

4. students understand the emerging trends in sensor technologies and their applications in real-world networks.

Seminar:



1. Mr. R. Sathish - Digital and Social Media Marketing

On **22nd August 2022**, **Mr. R. Sathish**, Assistant Professor, conducted a

Seminar on Digital and Social Media Marketing.

ECE students gained valuable insights into the **recent trends** in digital marketing techniques. The seminar highlighted effective methods for **promoting commodities** through social media platforms, providing students with essential knowledge for navigating the world of digital marketing.

Word scramble

- | | |
|----------------------|-------------------|
| 1. PIOMCELR | __M____R |
| 2. TOPYHN | P_____ |
| 3. RYRAA | _R____ |
| 4. RIALVALOBLBGL | ____A_V____E |
| 5. GUMEARNT | AR___E_T |
| 6. OSCAGRNLITEIRP | S__I_IN__PE_A____ |
| 7. CTRLRECRMIONC | _I_R_C_N__O____R |
| 8. OOLAENUESVABLES | _OOL____L__S |
| 9. ETAARPREM | P_____ET_R |
| 10. FUANVRCABIETLION | ____ABL__U____ION |

Answers:

1. Compiler
2. Python
3. Array
4. Global Variable
5. Argument
6. Slicing Operator
7. Micro Controller
8. Boolean Values
9. Parameter
10. Variable Function



EDITORIAL BOARD

Editorial Members

Faculty Coordinators:

- Mr. M. Mariselvam

Student's Convenors:

1. Godson J, 2nd Year
2. Valluru Mahesh Babu, 3rd Year
3. David Abishek. M, 3rd Year