



TECH HERTZ'23

NEWS LETTER

MAR 2023 - MAY 2023



**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 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 endeavors. I would like to reaffirm our sincere personal commitment to help each to succeed in your academic endeavors. I heartily welcome our students and wish them the very best for a successful and glorious future.

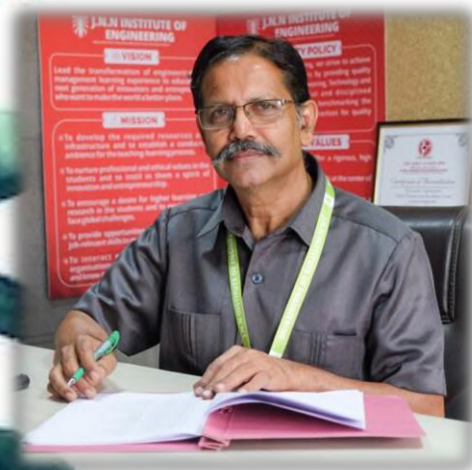
VICE CHAIRMAN



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

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

HOD OF ECE DEPT.

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. R. Nithya	M.E	Assistant Professor
4.	Mr. M. Mariselvam	M.E	Assistant Professor
5.	Mrs. N. Malathy	M.E	Assistant Professor
6.	Mrs. P.B. Smitha	M.E	Assistant Professor
7.	Mr. K.T. Pannerselvam	M.E	Assistant Professor
8.	Mrs. Mullaikodi	M.E	Assistant Professor
9.	Mr. G. Ayyapan	M.E	Assistant Professor
10.	Dr. J. Vijay Anand	M.TECH, Ph. D	Associate Professor
11.	Mr. J. Praveen Kumar	M.E	Assistant Professor
12.	Ms. B. Shanmathi	M.E	Assistant Professor

A decorative border of green leaves and branches frames the top and sides of the page. The leaves are various shades of green, with some showing veins and a slightly glossy texture. The branches are thin and dark green.

EVENTS

GUEST LECTURE

Date: 21st March 2023

The ECE students attended a guest lecture on the *working function of DSP processors and the ARMA process*. The session was delivered by Dr. O. Vignesh, Professor in the Department of ECE at Eawasri Engineering College. He provided in-depth knowledge of Digital Signal Processing (DSP) and explained how DSP processors are utilized in various real-time applications. He also covered the ARMA (Auto-Regressive Moving Average) process, an essential time series modeling technique widely used in fields like economics, engineering, and signal processing. Dr. Vignesh demonstrated practical applications of these concepts and their relevance in modern technology.

Another insightful guest lecture was conducted on *Advanced Concepts of Machine Learning and Implementation of Advanced Algorithms in Machine Learning*. The session was led by Mr. Socrates Krishnamurthy, a Data Scientist based in the USA. He explained the importance of Machine Learning (ML) and Artificial Intelligence (AI) in today's world, particularly focusing on cutting-edge algorithms and their applications in solving real-world problems. He discussed recent advancements in ML, from supervised learning techniques to deep learning models, and highlighted how these technologies are shaping industries ranging from healthcare to finance.

WORKSHOP

Date: 20th March 2023



A comprehensive workshop on *Embedded Testing* was organized for students, where they learned about the latest trends in software and hardware testing tools. Dr. Raghav Menon, Manager at Cap Gemini, Chennai, shared his industry expertise on how embedded systems are tested for functionality, performance, and reliability. The workshop covered both theoretical and practical aspects of testing, with a focus on the integration of software and hardware testing methods. Students gained valuable insights into the tools and frameworks used by professionals to ensure the robustness and efficiency of embedded systems, which are

integral to industries such as automotive, robotics, and electronics.

Date: 23rd March 2023

The workshop on *Latest Developments in 5G Communication* was conducted by Dr. Ramjee Prasad, Professor at Aarhus University, Denmark. This workshop focused on the evolution of communication technologies, with a special emphasis on the groundbreaking advancements in 5G networks. Dr. Prasad explained how 5G technology promises to revolutionize industries by enabling faster speeds, low latency, and more reliable connectivity. He also introduced the concept of *Human Bond Communication*, which explores the potential of using human-centric communication methods to enhance the user experience in 5G-powered devices and applications.



SEMINAR

Date: 6th March 2023

A seminar was held to educate students about various higher education opportunities and career growth through advanced studies. The seminar covered the different master's courses students could pursue, both domestically and internationally. ECE Alumni were invited to share their experiences and advice on pursuing higher

education, internships, and research opportunities in fields like electronics, computer science, and telecommunications. The seminar also included an awareness program that provided guidance on scholarships, application processes, and career paths available after completing a higher degree. Students were encouraged to explore opportunities that align with their interests and long-term career goals.

Annual Day



"YUKTHI-2023", The annual day of J.N.N Institute of Engineering was celebrated with great enthusiasm and spirit. Legendary Dance Master Tharun was the Chief Guest of the day and he enthralled the audience with his interaction.

Engineering and Management students of JNN Institute of Engineering exhibited their various talents with dance, singing, miming etc.

Wordsearch

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Answers

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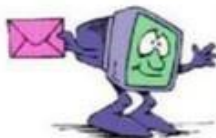


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LOL





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2. Godson J, 3RD year
3. David Abishek. M, 2nd year
4. Chilakuru OmPrakash Reddy, 1st Year