



TECH HERTZ'21

NEWS LETTER

SEP 2021 - NOV 2021



**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 shift 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.

From The Desk of Principal



Dr. A.V. Mayakannan

Since its inception in the year of 2008, the college has been striving towards maintaining high academic standards and excellence in many fields. We are committed to provide our students with a wide variety of opportunities in order to help them attain their highest potentials.

As the principal I am proud of my students who have achieved high standards in academics and various co-curriculum activities. Our objective is to turn the challenges of the changing world into wisdom of opportunity for the future.

We have a dedicated team of faculty, striving hard to provide the students with the latest knowledge and skill that would help them to stand out in this fiercely competitive world. Our campus is vibrant with energy, enthusiasm and activity. It will be our endeavor to make your experience very enriching and memorable.

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

LIST OF FACULTY

S.NO	NAME OF THE FACULTY	QUALIFICATON	DESIGNATION
1.	Dr. D. Joseph Jeyakumar	M.E, PH.D	Professor
2.	Dr. A.V. Mayakannan	M.E, PH.D	Professor
3.	Mr. U. Siddharth Nambi	M.E	Associate Professor
4.	Mrs. N. Revathy	M.E	Associate Professor
5.	Mrs. R. Nithya	M.E	Assistant Professor
6.	Mr. M. Mariselvam	M.E	Assistant Professor
7.	Mr. R. Partheepan	M.E	Assistant Professor
8.	Mr. M. Karthikprabhu	M.E	Assistant Professor
9.	Mr. J. Praveen Kumar	M.E	Assistant Professor
10.	Mrs. N. Malathy	M.E	Assistant Professor

S.NO	NAME OF THE FACULTY	QUALIFICATON	DESIGNATION
11.	Mr. S. Tamilvanan	M.TECH	Assistant Professor
12.	Mrs. R. Chandralekha	M.E	Assistant Professor
13.	Ms. B. Shanmathi	M.E	Assistant Professor
14.	Ms. S. Soundarya	M.E	Assistant Professor
15.	Ms. D. V.Swathi	M.E	Assistant Professor
16.	Ms. S. Indria	M.E	Assistant Professor
17.	Mrs. A. Evangelin Ebenezer	M.E	Assistant Professor
18.	Mrs. R. Rajarajeswari	M.E	Assistant Professor
19.	Mrs. T. Indhumathi	M.E	Assistant Professor
20.	Ms. C .Ramya	M.E	Assistant Professor

STUDENTS ACHIEVEMENT

NATIONAL SYMPOSIUM: 2021

S.No	Name of the Student	Event Participated	Name of the Organization	Date
1	Arun Kumar L	Tech Events	Pondicherry Engineering College, Puducherry	09-09-2021
2	Godson J	Tech Events	Pondicherry Engineering College, Puducherry	09-09-2021
3	Noor Jakeer	Tech Events	Pondicherry Engineering College, Puducherry	09-09-2021
4	Jayasri B	Tech Events	Pondicherry Engineering College, Puducherry	09-09-2021

Newsletter: Academic Events and Achievements (2021- 2022)



September 2021

C Programming and Data Structures - Data Sorting and Management

Speaker: Dr. K.B. Jayanthi, Professor, K.S.Rangasamy College of Technology, Tiruchengode

Type: Webinar (Online)

Date: 12/09/2021

Details: This webinar provided an in-depth understanding of data sorting techniques and effective management strategies in C programming. Students gained practical insights into structuring and optimizing data for efficient programming solutions.

Logic Design and Modeling Using Microwind

Speaker: Ms. V. Valarmathi, Visiting Professor (IT Expert Systems)

Type: Add-On Course (Online)

Date: 14/09/2021

Details: A focused session on utilizing Microwind software for logic design and modeling. Participants explored hands-on techniques for circuit design and learned about the applications of Microwind in VLSI design.

Audio Signals Differentiation with Video Signals Using MATLAB

Speaker: Dr. Rajeev Kumar, IIIT, Tirupathi

Type: Workshop (Online)

Date: 23/09/2021

Details: This workshop introduced participants to MATLAB's capabilities in processing and analyzing audio and video signals. Students explored differentiation techniques and their applications in multimedia technologies.

VLSI: Gate-Level Modeling and Chip Fabrication

Speaker: Mr. Krishna Kumar, CEO, Skill Up by Simplilearn

Type: Workshop (Online)

Date: 23/09/2021

Details: The workshop covered the fundamentals of VLSI, focusing on gate-level modeling and the basics of chip fabrication. It provided participants with a clear understanding of how theoretical concepts are applied in real-world VLSI projects.

November 2021**National Level Symposium**

Chief Guest: Mr. Kaushik Raghav, Founder & CEO,
Cryptons

Type: Event (Onsite)

Date: 04/11/2021

Details: The symposium featured an array of engaging events, including Code Debugging, Project Mania, Paper Presentation, Technical Memes, Passing the Pass, and Dump Charade. This event provided a platform for students to showcase their technical skills and creativity.

The Importance of Industry 4.0

Speaker: Dr. Swarna Ravindra Babu, Founder, COOVUM
Smart System & Services Pvt. Ltd

Type: Seminar (Online)

Date: 11/11/2021

Details: This seminar delved into the concepts of Industry 4.0, highlighting its importance in modern manufacturing and production systems. Students learned about automation, IoT, and smart factories.

Communication Networks: MANETs and VANETs

Speaker: Dr. M. Karthikeyan, Vellore Institute of
Technology, Vellore

Type: Webinar (Online)

Date: 18/11/2021

Details: A comprehensive session on Mobile Ad-Hoc Networks (MANETs) and Vehicular Ad-Hoc Networks (VANETs). Students were introduced to the unique characteristics and applications of these networks in modern communication systems.

Control Systems - Automation Devices to Manage, Implement, and Execute Processes and Commands

Speaker: Dr. Muruganandham, Professor, SRM University, Chennai

Type: Webinar (Online)

Date: 18/11/2021

Details: This webinar focused on the role of automation devices in control systems, highlighting their ability to execute processes and commands effectively. Real-world examples and case studies were discussed to provide practical insights.



Yoga & Meditation: Incorporating Holistic Health in Students' Lives

Speaker: Ms. Subha, Physical Director

Type: Session

Date: 18/11/2021

Details: A wellness session aimed at promoting holistic health among students. The session emphasized the importance of mental and physical well-being through the practices of yoga and meditation.

This academic year was filled with enriching activities and events that provided students with valuable knowledge and insights into advanced technical concepts and holistic development. Each event brought unique learning opportunities, empowering students to enhance their skills and prepare for future challenges. Stay tuned for more updates!

EDITORIAL BOARD

Academic Year	Editorial Members
SEP-NOV 2021-2021	Faculty Coordinators: Ms. B. Shanmathi Student's Convenors: 1. Vignesh Rohith R, 4 th year 2. Loghanandhini K, 3 rd year 3. Godson J, 2 nd year