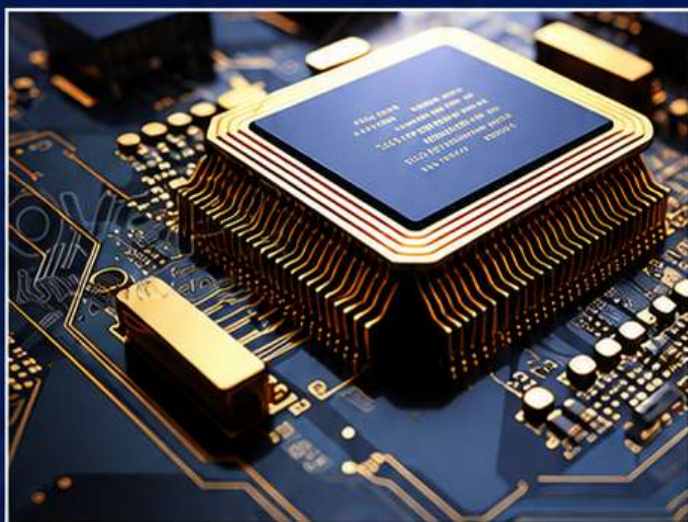
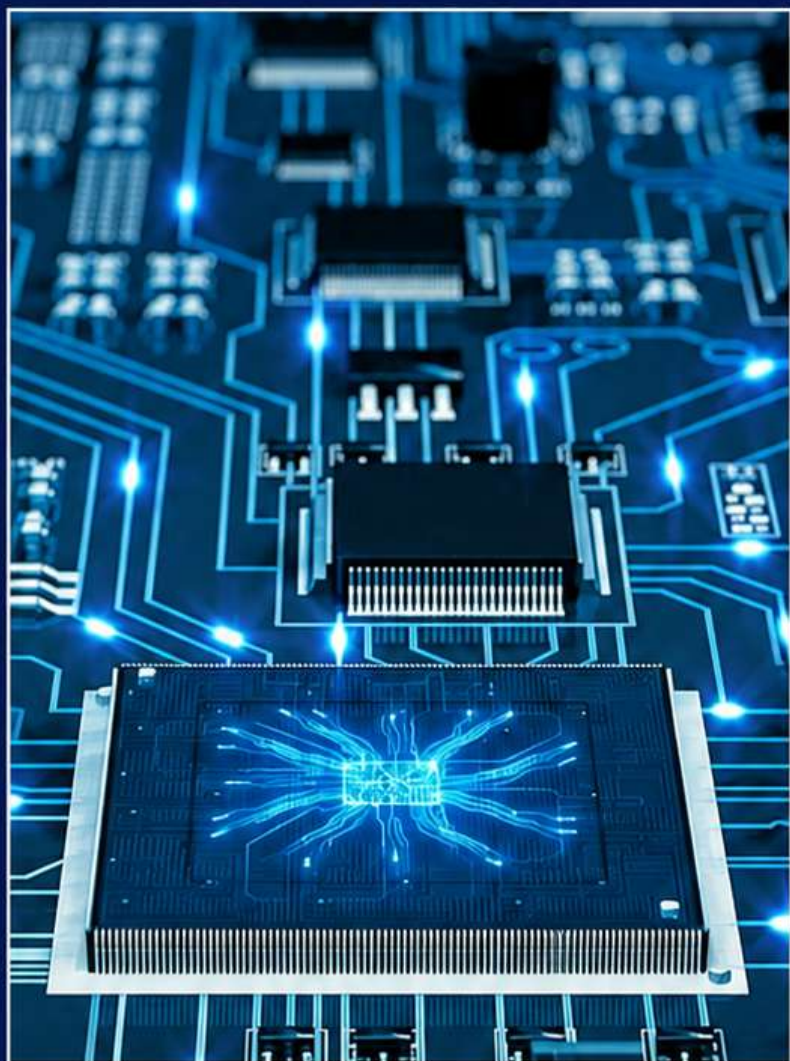




JERUSALEM COLLEGE OF ENGINEERING
AN AUTONOMOUS INSTITUTION

**DEPARTMENT OF ELECTRICAL
AND ELECTRONICS ENGINEERING**
EEE NEWSLETTER



JANUARY-JUNE 2026

VISION OF THE DEPARTMENT

Department of Electrical and Electronics Engineering is committed to produce high profile, **competent** and **disciplined** Engineers with **technical knowledge**, ethical leadership and **entrepreneurship** quality to contribute towards social transformation and nation building.

MISSION OF THE DEPARTMENT

M1: To make our graduates **highly competent** and experts in practical problem solving with abstract thinking skills.

M2: To endow students with high quality **technical knowledge** of electrical sciences through innovative teaching and research practices.

M3: To empower students with leadership and **entrepreneurship** quality, capable of providing their professional mettle with excellent communication skills.

M4: To encourage **cross border research** with innovative ideas and to impart the quality of life-long learning based on ethical values.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1. Graduates use their **broad knowledge of electrical engineering as a foundation for on-going learning**, and to have realized some success early in their professional careers.

PEO2. Graduates use their creative and critical reasoning skills to solve **technical problems, ethically and responsibly, in service to society.**

PEO3. Graduates learn and adapt themselves to the constantly evolving technology by pursuing **higher studies.**

PEO4. Graduates, within few years of graduation, should demonstrate **leadership** and initiative to **organizational goals**, facilitate the **achievements** of others, and obtain substantive results.

PEO5. Graduates, within few years of graduation, should demonstrate a commitment to Teamwork while working with others of **diverse cultural and interdisciplinary research.**

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO 1: Able to utilize the knowledge of Power Electronics and Drives in collaboration with power systems in innovative, dynamic and challenging environment, for the research-based teamwork.

PSO 2: Can explore the scientific theories, ideas, methodologies in renewable energy engineering, and use this erudition in their professional envelopment and gain sufficient competence to solve the current and future energy problems universally

PSO 3: The understanding of technologies like PLC, PMC, process controllers, transducers and HMI one can analyze, design electrical and electronics principles to install, test, maintain power system and applications.

PROGRAM OUTCOMES (POs)

Engineering Graduates will be able to:

- 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 teamwork:** 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.

NEWSLETTER - JANUARY 2026 to JUNE 2026

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING



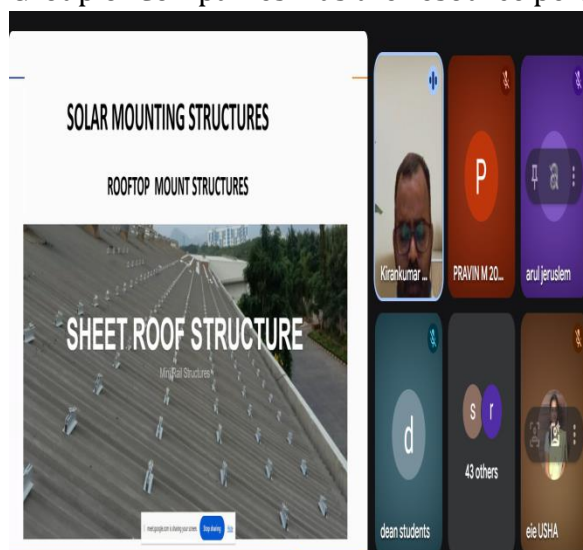
Annual Virtual Alumni Meet was conducted in online platform on 25.01.2026 for the EEE Alumni students. The EEE Alumni Students from the inception till the passed out attended the meeting.



Virtual Alumni Interaction was organized for the EEE students on 28.01.2026 at M209 with the Alumni Mr. Harun Rasheed, Team Lead, Data Engineer, Hitachi Solution -Batch 2012-2016.



Guest Lecture on the topic “Conserve Oil & Gas, Go Green” was organized for the EEE students on 07.02.2026 at the Seminar Hall. Dr.G.Thiagu, Sustainability Scientist, New Bee Group of Companies was the resource person



Webinar was organized for the EEE students on the topic “**Designing of Solar Power Systems**” on 01.04.2026 in the Google Meet Platform. **Mr. G.Kiran Kumar, Senior Manager, Solar Central Services** was the resource person.



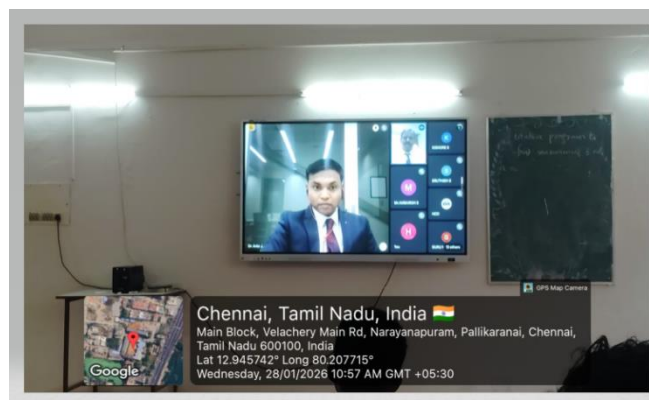
Alumni Talk on “career Opportunities – Green Energy” was organized for the EEE students on 10.01.2026 at M209. Mr. S. Satheesh, Project Coordinator Kayilan5G Energy Park Pvt Ltd. Group Company of Regio was the resource person.



A strategic road map for Gate Examination Success was organized for the EEE students on 10.01.2026 at M209. Mr. S. Shriram, Technical Lead, ABB India Limited, Bangalore was the resource person.



Guest Lecture on “Career Guidance and Study Aboard” was organized for the EEE Students on 02.03.2026 at M209.



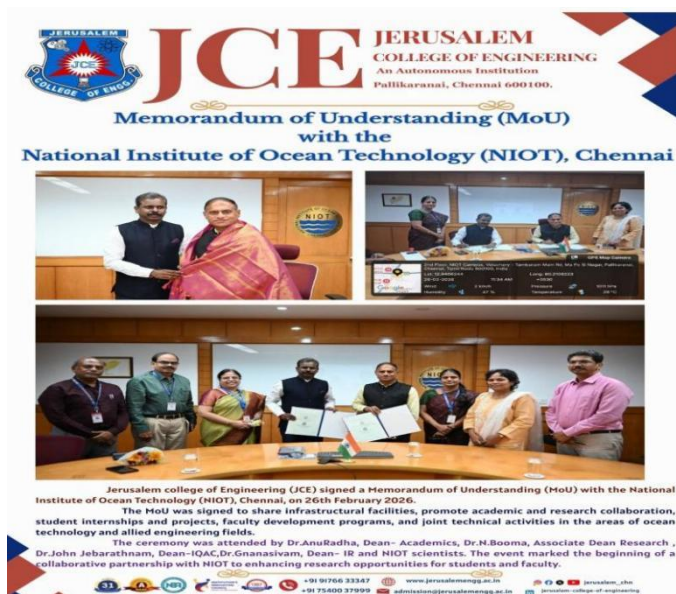
Virtual Alumni Interaction was organized for the EEE students on 28.01.2026 at M209 with the Alumni Dr. Anto J Mohan, Founder & CEO 6Atra - Batch 2014-2016 (M.E. PED)



A Project Expo was conducted for the Final Year EEE Students on 01.04.2026 in the Idea Lab, JCE. Dr.S.Arun, Dean research, Professor-ECE department was the resource person.



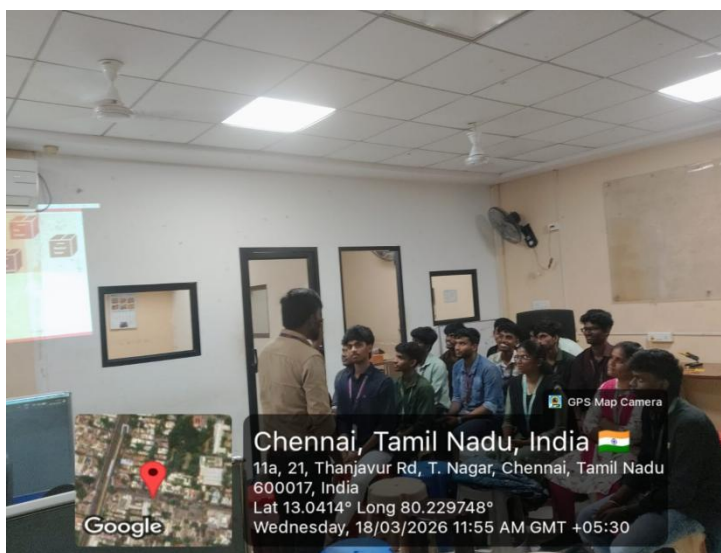
A project Expo was conducted for the Third year EEE students in association with Electronics Club on 23.04.2025 at Machine Laboratory. Dr.S.Sathiyamurthy, Principal and Professor was the resource person.



An MOU was signed with the National Institute of Ocean Technology(NIOT),Chennai on 26.02.2026. Dr.N.Booma, Associate Dean, Research attended the MOU.



Workshop on "Introduction to Arduino Uno with Node Mcu" from 02.03.2026 to 03.03.2026 at PSS Lab, Idea Lab in association with The Institution of Engineers (India) , kancheepuram Local Centre.



An Industrial visit was arranged for the students of EEE Department to Pantech India Pvt., Ltd.Chennai on 18.03.2026.



An School Visit to **Government Higher Secondary School Moovarasampet, Kancheepuram** on 25.02.2026. Ms.S.Sivajothi Kavitha and Ms.D.Usha was the resource person for the Visit.

Paper Published by Faculties

Sl. No	Name of the Faculty	Paper Title	Journal Name	Year
1	V.Jamuna, Subhashini P, Narmadha T. V	An Isolated Diamas Multilevel Inverter Model Integrated with a Cutting-Edge Optimized Controlling Techniques for EV Applications	Journal of Electrical Engineering and Technology, Korea. https://doi.org/10.1007/s42835-025-02549-z	January 2026
2	V.Jamuna, Rajasekar K	Development of a Secure Hybrid Deep Learning Model for HoneyPot Security and Monitoring System using Quantum Dilated Convolutional-Fuzzy-Maxout Network”	IEEE Canadian Journal of Electrical and Computer Engineering, Vol.49, No.3, pp:312-320	May 2026.
3	V.Jamuna, Rajasekar, Kavitha A R	A Unified Hybrid Deep Learning Architecture for Android Malware Detection and Cloud HoneyPot Intrusion Identification using LightGBM-Driven Quantum Dilated Convolutional Fuzzy Maxout Network (LGBM-QDCFMNet)	International Journal of Applied Mathematics, Bulgaria	June 2026.

Conference Attended by Faculties

Sl. No	Name of the Faculty	Title	Name of the Institution	Date
1	Jamuna V, Aravind balaji, Mukesh, Sathya Narayanan, Usha, Sivajothi Kavitha	“Multimode PV-Based Inverter System for EV Charging Using Grid and Battery Support	International Conference on innovation and Challenges in Engineering and Technology(ICICET-2026), Kings Engineering College	20.03.2026
2	Jamuna V, Balaji, Vinoth Kumar, Samuel, Sivajothi Kavitha, Usha	Smart Solar Umbrella With Integrated Charging And Lighting System	International Conference on innovation and Challenges in Engineering and Technology(ICICET-2026), Kings Engineering College	20.03.2026
3	Dr.N.Booma, MsM.Venmathi	Q-ZSI for Power factor correction in PMBLDC motor based Electric vehicle	ICAMME'26 International Conference on Advances in Mechanical and Mechatronics Engineering,.St.Joseph's College of	26.03.2026

			Engineering,Chennai	
4	Ms.S.Rudhra	Wireless power transfersystem for Electric Charging	International Conference on innovation and Challenges in Engineering and Technology(ICICET-2026), Kings Engineering College	20.03.2026
5	Sivajothi Kavitha, Jamuna V, Meganathan, Reshma, Saran	Smart Healthcare Droid for Sanitary Workers	International Conference on innovation and Challenges in Engineering and Technology(ICICET-2026), Kings Engineering College	20.03.2026
6	D.Usha, Jamuna, Madhavan, Bharanidharan, Sanjeev	Standalone Solar PV System with AC and DC integration	International Conference on innovation and Challenges in Engineering and Technology(ICICET-2026), Kings Engineering College	20.03.2026
7	Jamuna V, A. Marimuthu, S.Sheik Abdullah, N.Ismayil Kani,	Automatic Localization of Knee Joint Area in Plain Radiographs using Adaptive Faster RCNN	International Conference on Signal Processing, Computation, Electronics, Power and Telecommunication (IconSCEPT) 2025, National Institute of Technology Puducherry	22.03.2026
8	Jamuna V, C. Sankari	A Novel Symmetry-Aware Dual-Stream Vision Transformer with Innovative Progressive Token Refinement for Brain Tumor Classification	International Conference on Communication and Signal Processing (ICCSP), & Adhiparasakthi Engineering College, Melmaruvathur	20.04.2026 22.04.2026
9	Indra Damarla, Dr.N.Booma, M.Venmathi, P.Anbarasan	Analysis of a Seven-Level Asymmetric Inverter with a Cascaded H-Bridge Configuration	2 nd International Conference on Artificial Intelligence and Knowledge Discovery in Concurrent Engineering (ICECONF)	10.09.2025

Patents Published by Faculties

Sl. No	Name of the Faculty	Patent Title	Date of Filling	Status
1	Dr.V.Jamuna, Dr.S.Vinod, Dr.S.Ramakrishnan, S.Sivajothi Kavitha, D.Usha, S.Rudhra, Mr.J.Arul Prakash	Sustainable IOT- based weather monitoring System	13.02.2026	Published

2	Dr.V.Jamuna, Dr.S.Vinod, Dr.S.Ramakrishnan, S.Sivajothi Kavitha, D.Usha, S.Rudhra, Mr.J.Arul Prakash	Smart Solar Peltier Effect cold storage unit for small and marginal farmers	13.02.2026	Published
3	Dr.S.Vinod, Dr.S.Ramakrishnan, Dr.V.Jamuna, Dr.N.Booma,S.Sivajothi Kavitha, D.Usha, S.Rudhra, Mr.J.Arul Prakash	IOT-based solar water heater cum induction system medical application	13.02.2026	Published
4	Dr.S.Vinod & Ms.S.Rudhra	AI- Based Newborn Jaundice Treatment Device- UK Design Grant	22.01.2026	Granted

FDP Attended by Faculties

Sl. No	Name of the Faculty	Title	Name of the Institution	Date
1	Dr.V.Jamuna	Diffusion of Green Innovation Procedures in Research Practices	ED cell, Sanketika Vidya Parishad Engineering College, Visakapatnam	30.03.2026
2	Dr.V.Jamuna	Advanced Electric Vehicle Systems & Power train Engineering	Skyyskill Labs, Bengaluru	16.06.2026 to 21.06.2026
3	Dr.N.Booma	FDP on “Innovations and Challenges in Electric Mobility Systems for Smart Cities”	St.Joseph’s College of Engineering,Chennai	01.12.2025 to 05.12.2025
4	Dr.S.Vinod Ms.S.Rudhra	ATAL sponsored FDP on Artificial Intelligence and Machine Learning Applications in Electric Vehicles and Renewable Energy Systems	PSNA college of Engineering	02.02.2026 to 07.02.2026.
5	Dr.S.Vinod Ms.S.Rudhra	ATAL sponsored FDP on AI & IoT Integration in Smart Renewable Energy Networks	R P Sarathy Institute of Technology.	19.01.2026 to 24.01.2026
6	S.Sivajothi Kavitha and D.Usha	Indian Knowledge Systems (IKS) online webinar session	Siddhanta Knowledge Foundation a recognized IKS Shikshak Prashikshan Kendra of the IKS Division of the Ministry of Education.	25.02.2026

7	S.Sivajothi Kavitha and D.Usha	6 Days National Level Faculty Development Program on “Generative & Agentic AI-Tools & Demo’s”	Sardar Vallabhbhai National Institute of Technology	16.02.2026 to 21.02.2026
8	S.Sivajothi Kavitha and D.Usha	2 Days FDP on Embedded System Mastery	Skyskill Labs, Bengaluru	27.03.2026 to 28.03.2026
9	S.Sivajothi Kavitha and D.Usha	6 Days FDP on Advanced Electric Vehicle System & Power train Engineering	Skyskill Labs, Bengaluru	16.06.2026 to 21.06.2026
9	J Arul Prakash	One Day FDP on “Deep Tech Based Research & Innovation using AI”	Sanketika Vidhya Parishad Engineering College	13.06.2026
10	J Arul Prakash	Five Day FDP on “From Content to Competency : Future ready Pedagogies for Gen Z Learners	Anil Neerukonda Institute of Technology & Science, Visakhapatnam	01.06.2026 to 05.06.2026

Guest Lecture/Worshop Attended by Faculties

Sl. No	Name of the Faculty	Name of the Institution	Date
1	Dr.V.Jamuna	Modeling of Non-Linear Industrial Process using Machine Learning, “The Institution of Engineers (India), Kanchepuram Local Centre.	30.01.2026
2	Dr.V.Jamuna	5G Technology:Architecture, Applications, and Future Scope, “The Institution of Engineers (India), Kanchepuram Local Centre.	23.02.2026
3	Dr.V.Jamuna	Role of AI in Digital Payments”, The Institution of Engineers, India, Vellore Institute of Technology, Chennai Campus	13.04.2026

Sanctioned Funded Projects

Sl. No	Name of the Investigator	Title	Amount	Year applied
1	Ms.S.Rudhra	EDII-TN-IVP Grant under Voucher -A-Smart Rehabilitation system for Achilles tendon recovery	Rs.3,00,000/-	24.02.2026

Faculty as Resource Person

Sl. No	Name of the Resource Person	Institute Name	Date	Venue
1	Dr.S.Vinod- One day National Seminar	The Institution of Engineers(India)	07.03.2026	Jerusalem College of Engineering
2	Dr.S.Vinod- FDP	Department of Science and Technology, New Delhi	09.02.2026	Jerusalem College of Engineering
3	Dr.S.Vinod- International Conference	Aalim Mohammed Salegh College of Engineering	11.04.2026	Avadi,Chennai
4	Dr.S.Vinod- FDP	Aalim Mohammed Salegh College of Engineering	20.06.2026	Avadi,Chennai

Achievements

Sl. No	Name of the Faculty/Student	Year	Event/Institution
1	Dr.S.Vinod, Ms.S.Rudhra	April 2026	Introduction to soft computing-NP TEL Certification
2	Dr.S.Vinod, Ms.S.Rudhra	Feb 2026	Published a book chapter on "Creating Trustworthy AI: A Lifecycle Risk Management Framework - pages (1-18),
3	Dr.N.Booma	March 2026	Ms.Savitha completed her Ph.D under the Supervisor
4	Ms.S.Sivajothi Kavitha & Ms.D.Usha	May 2026	Sensors and Actuators - NPTEL Certification