



# Electroverse

# NEWSLETTER

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## Vision

To make the Department of Electronics and Communication Engineering of this Institution the unique of its kind in the field of Research and Development activities in this part of world.

## Mission

To impart highly innovative and technical knowledge in the field of Electronics and Communication Engineering to the urban and unreachable rural student folks through Total Quality Education.

## Editor-in-Chief Message

The Department of Electronics and Communication Engineering (ECE) continues to advance with a strong vision of innovation, research excellence, and industry readiness. Key highlights include the grant of an Indian patent in 5G communication, new patent filings, and project proposals under ISRO RESPOND and IKS. Faculty contributions through journal publications further strengthen our research focus. The department emphasizes practical learning through value-added courses, hands-on training, and industry interaction in emerging areas such as IoT, Machine Learning, FPGA, and automation. Students have also excelled in innovation events, skill development programs, and placements. We remain committed to nurturing skilled engineers equipped for future technological challenges and societal impact.

**Dr. R. Suresh Babu, M.E., M.B.A, Ph.D.**  
Professor & Head

– Editor-in-Chief, Electroverse

## Patent Granted

Dr. R. Ashok, Dr. R. Rajprabu, Dr. K. Ragini, Dr. T. Prathiba, Dr. S. Nisha Rani, Mrs. P. Muthumari, Mr. Wesley Moses Samdoss, and Mr. P. Aravind have been granted an Indian patent for their innovative work titled “5G Antenna for Cognitive Communication.” The patent (No. 475135-001) was officially granted on 19th January 2026.

## Patent Filed

S. Alwyn Rajiv, Dr. B. K. Parrthiban, Dr. R. Suresh Babu, Dr. T. Pandi Selvi, Mrs. C. Nagavani, and Dr. S. Senthil have filed a patent titled “Dental Scanner” (Application No.: 88247-001).



**INTELLECTUAL  
PROPERTY INDIA**

PATENTS | DESIGNS | TRADE MARKS  
GEOGRAPHICAL INDICATIONS

# Funding Applied

A project proposal titled “AADHI VEDHA – Reviving Tribal Knowledge through Innovation” has been submitted under the Indian Knowledge Systems (IKS) Scheme 2026, with Dr. R. Suresh Babu serving as Principal Investigator (PI) and Dr. K. Ragini as Co-Principal Investigator (Co-PI). The project has a total proposed budget of ₹25,00,000.

A project proposal titled “Data-driven Fault Detection / Classification in Electronic Circuits” has been submitted under the ISRO RESPOND Basket Scheme 2026, with Dr. K. Ragini serving as Principal Investigator (PI) and Dr. R. Suresh Babu as Co-Principal Investigator (Co-PI). The project has a total proposed budget of ₹15,00,000.

Dr. N. M. Mary Sindhuja, Dr. R. Suresh Babu, and Mrs. P. Ramalakshmi have submitted a project proposal titled “Design & Development of Dual Polarization, Wideband, Electronically Steerable Connected Array Antenna at X and Ku Band” to the ISRO RESPOND Programme on 30th January 2026, with a total proposed budget of ₹15,13,400.

## Journal Publication

T. Pandiselvi, R. Reshma, K. M. S. Dhesika, and K. Karthiga Rani published a research paper titled “Smart Track Vision: Obstacle Detection in Railways Using Deep Learning” in the International Journal of Innovative Research in Technology, Volume 12, Issue 8 (ISSN: 2349-6002), in January 2026.

## Journal Publication

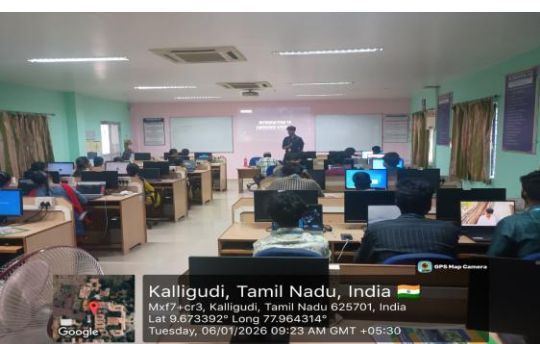
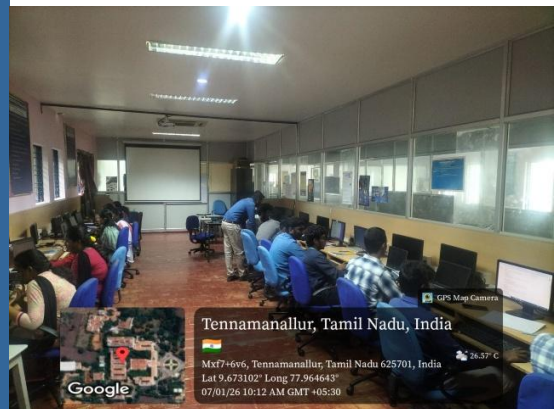
Ramalakshmi P., Dr. R. Suresh Babu, Dr. N. M. Mary Sindhuja, and Muthumari P. published a research paper titled “Inverted L-Shaped Dual Band Antenna for Energy Harvesting” in The Indian Journal of Technical Education, Volume 48, No. 4, October–December 2025 (ISSN: 0971-3034).

## Industrial Training

Mr. P. Aravind and Mr. S. Wesley Moses Samdoss attended an Embedded C training program at Infineon Technologies, Bangalore, from 5th January 2026 to 13th January 2026.

# Program Organized

The Department of ECE organized a Value Added Course on “Integrated Full Stack Web Development with IoT Networks” from 5th January 2026 to 10th January 2026. The program was conducted by Ms. Deepika D, Technology Trainer at Reccsar Private Limited, Madurai. The course was coordinated by Dr. T. Prathiba and Mr. S. Alwyn Rajiv.



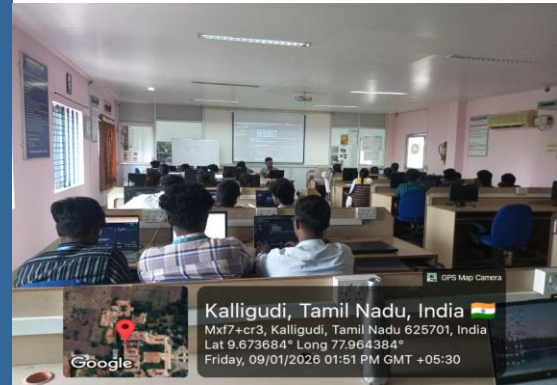
The Department of ECE organized a six-day Value Added Course on “Embedded with IoT” from 5th January 2026 to 10th January 2026. The program was delivered by Mr. Nawaz Syed and Mr. Sankar Ganesh from Pantech Solutions India Pvt. Ltd.. The course was coordinated by Dr. N. M. Mary Sindhuja and Mrs. P. Ramalakshmi.

The Department of ECE organized a six-day Value Added Course on “Industrial Automation Using PLC and SCADA” from 5th January 2026 to 10th January 2026. The program was conducted by IOLOGIX, Chennai. The course was coordinated by Dr. T. Pandi Selvi (ASP/ECE) and Mrs. P. Muthumari (AP/ECE).



# Program Organized

The Department of ECE organized a six-day Value Added Course on “Machine Learning Using Python” from 5th January 2026 to 10th January 2026. The program was delivered by Mr. Ahamed Vahith from New Technology Career Solutions, Coimbatore. The course was coordinated by Dr. Nisha Rani (AP/ECE) and Mrs. T. Monisha Birlin (AP/ECE).



The Semiconductor Innovation Club, Department of ECE, organized the first week of hands-on training on “Real-Time FPGA Implementation Using Verilog HDL” on 28th January 2026. A total of 25 students participated in the program.

The Department of ECE organized the project demonstration for the Value Added Course on “Integrated Full Stack Web Development with IoT Networks” on 27th January 2026. The projects were evaluated by S. K. Sanjay Raj, Director of Reccsar Private Limited, Madurai.



# Program Organized

Orientation program conducted under The Entrepreneurship Development and Innovation Institute (EDII) for EDII–TN Hackathon, titled “Nimirndhu Nil,” under the “Tamil Nadu Youth Innovation and Entrepreneurship Development Programme (TNYIEDP)” by Dr.T.Prathiba, EDC member on 9/01/2026 for ECE/Mechanical/IT/CSE/ADS and few EDC members.



## Reviewer

Mrs. T. Monisha Birlin completed a review for the SCI-indexed journal Knowledge-Based Systems on 28th January 2026.

## Skill Development Program Attended

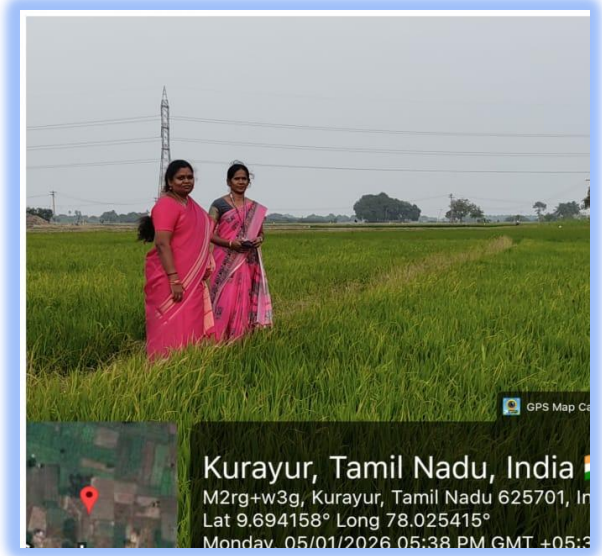
Dr. T. Prathiba and Mrs. P. Muthumari, along with nine ECE students, attended a Tech Startup Sensitisation Program at MADITSSIA, Madurai, organized by Centre for Entrepreneurship Development and Incubation (CEDI).

Dr. K. Ragini attended an AOC workshop on “Space Division Multiplexing and Distributed Fiber Optic Sensing” held on 29th and 30th January 2026 at Indian Institute of Technology Madras, Chennai.

S. Alwyn Rajiv participated in the One Day Faculty Development Programme (FDP) on “Network Security,” organized by the Department of Computer Science and Engineering at PET Engineering College, conducted in online mode on 20th January 2026.

# Filed visit

Dr. T. Prathiba and Mrs. P. Muthumari carried out a field visit to Kurayur farmland on 6th January 2026 to study and explore measures for preventing wild boar intrusion into agricultural fields.



Dr. T. Prathiba and Mrs. S. Nisha Rani, along with eight ECE students, visited M. S. Swaminathan Research Foundation, Thanjavur, for project discussions and networking.



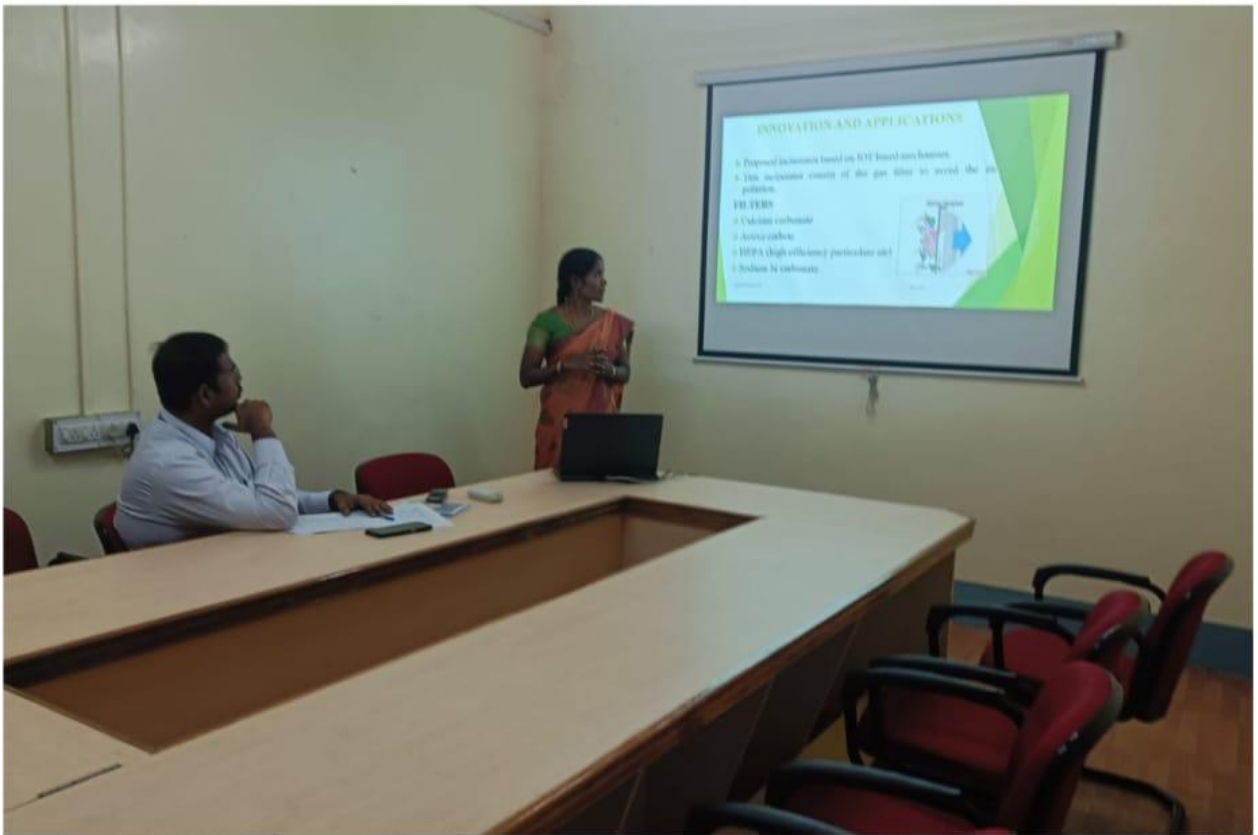
# Filed visit

Dr. T. Prathiba (ASP/ECE), Dr. S. Nisha Rani (AP/ECE), along with final-year ECE students Ariswaran C. and G. Dhanush, visited G. S. Hospital, Madurai, and met Dr. Ananthi Babu (M.S., DGO). They also visited Neethu Arasu Neuro Hospital and met Dr. S. Shylama Neethi Arasu (MD – General Medicine) for project discussions on 10th January 2026.



# Faculty Project Review

Mrs. P. Muthumari, AP/ECE and Community Innovation Fellow (CIF), attended the review meeting for the first tranche progress at ACIC Mepco Innovative Foundation on 08.01.2026. The activity was mentored by Dr. R. Suresh Babu, Professor & Head/ECE, and Mrs. P. Ramalakshmi, AP/ECE.



# Student Cocurricular Event Participation

Four student teams participated in the project pitching competition *BIO-INNOVATHON 2026*, organized by the Department of Biotechnology at St. Joseph's College (Autonomous). The event provided a platform for students to present innovative ideas in the field of biotechnology and interdisciplinary applications.

The participating teams and their projects are as follows:

1. **Aadhi Vedha:** Nivetha A., Preethika N.
2. **Matshya Maghila Shagai – Empowerment of Fisherwomen and Fishermen During Fishing Restrictions and Off-Seasons:** S. Nagasri
3. **Heal Step – Smart Footwear with Pressure Mapping for Pain and Fatigue Relief:** Parameshwaran, Mari Prakash, Radhakrishnan
4. **Ulavu Nayagi:** Avanthigapriya, Dhivyadharshini,

The teams were mentored by Dr. R. Suresh Babu, Professor and Head of ECE, and Dr. K. Ragini (AP/ECE).

## Student Extra-curricular Activitie

Balaji, a final-year ECE student, won the Silver Medal in a National Taekwondo competition held in Bangalore.

## GATE/CAT Score

Rama Chandra Boopasthi, a final-year ECE student, secured an impressive 88.87 percentile in the Common Admission Test (CAT).

## Students Skill Development Program Attended

Third-year ECE students A. Nivetha, S. Mohan Raj, L. Parameshwaran, R. Kamalakannan, K. Abinesh, B. Sivaprabhu, R. Gopi, and M. Arjun Venkat completed a five-day Skill Development Training Programme on “VLSI Design Flow (RTL to GDS) & FPGA Implementation” conducted at Thiagarajar College of Engineering. The sessions were held on 29th November 2025, 3rd December 2025, 6th December 2025, 20th December 2025, and 27th December 2025.

## Students Project Review

Kamala Kannan R., a third-year ECE student and Community Innovation Fellow (CIF), under the mentorship of Dr. T. Prathiba (ASP/ECE), attended a review meeting for the first tranche progress at ACIC Mepco Innovative Foundation, Mepco Schlenk Engineering College, on 8th January 2026.



## Placements

- Twenty-one final-year ECE students were selected in the placement drive conducted by Unitherm Engineers Ltd., Chennai, with a package of 3 LPA.
- Balaji, a final-year ECE student, has been placed at Quatec, Madurai.



## Editor-in-Chief

Dr. R. Suresh Babu, M.E., M.B.A, Ph.D.  
Professor & Head

## Faculty Coordinators



Dr. S. Nisha Rani, M.E., Ph.D.  
Assistant Professor



Mr. S. Alwyn Rajiv, M.E., (Ph.D.)  
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***“The best brains of the nation may be found on the last benches of the classroom.”***

***Dr. APJ Abdul Kalam***