



ECHOES

VOICE OF ECE

DEPARTMENT OF
ELECTRONICS & COMMUNICATION ENGINEERING

Faculty Team

Behind the Newsletter



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FROM THE DESK OF THE HOD - ECE

It gives me immense pleasure to present this edition of the ECE Department Newsletter, which reflects the vibrant academic, research, and student activities of our department.

ECE continues to strengthen its commitment to academic excellence, research, innovation, and industry engagement. Our faculty achievements, international academic interactions, research contributions, and collaborations in emerging technologies demonstrate the department's continuous pursuit of excellence.

This edition also highlights the achievements and experiences of our students, who continue to explore their potential through projects, internships, technical activities, and community initiatives. Through platforms such as PULSE, we encourage our students to transform classroom learning into practical experiences while developing leadership, creativity, teamwork, and problem-solving skills.

I sincerely appreciate the dedicated efforts of our faculty, students, research scholars, and newsletter team in making these accomplishments possible. Their enthusiasm and commitment continue to strengthen the ECE community.

Let us continue to innovate, learn, collaborate, and lead as we work towards building a future-ready generation of engineers and researchers.

My best wishes to the entire ECE family for continued success and excellence.



Dr. I. Govardhani

Professor & Head

Department of Electronics and
Communication Engineering
K L University

About department

The Department of Electronics & Communication Engineering (ECE), established in 1983, boasts 120 distinguished faculty members, including 101 with Ph.D. degrees, while others are pursuing their Ph.D. Faculty with rich industry experience cater to both academic and industry needs. State-of-the-art laboratories, Centres of Excellence, and Research Centres support undergraduate, postgraduate, and Ph.D. students, emphasizing R&D activities and innovative exploration beyond the curriculum.

With ₹259 million in sponsored projects from DST, ISRO, and other organizations, the department showcases a strong research culture, having published over 3,300 peer-reviewed articles. The vibrant academic calendar includes advanced certificate courses, seminars, visiting international faculty, and student paper contests. Student development programs, industry collaborations, and active associations further enhance the department's offerings.

Vision

To become a world-class department in the frontier areas of Electronics & Communication Engineering.

Mission

- To produce graduates with professional excellence
- To conduct quality research with social and industrial applications
- To provide technical support in transforming learners into entrepreneurs

PULSE - The Driving Force of ECE

PULSE, the official student body of the Department of Electronics and Communication Engineering, is more than a club — it is a vibrant platform that nurtures leadership, innovation, and collaboration among students. By transforming classroom knowledge into meaningful real-world experiences, PULSE bridges the gap between theory and practice, strengthening technical expertise along with essential skills such as teamwork, decision-making, and problem-solving.

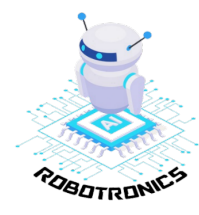
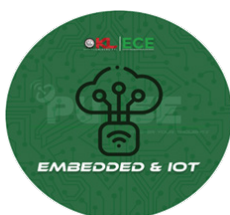
Through a dynamic blend of technical, cultural, and community-driven initiatives, PULSE creates opportunities for students to explore, innovate, and grow — both academically and personally.

Key Initiatives

- **Mock Expo** – A 24-hour problem-solving marathon encouraging creativity, innovation, and collaborative learning.
- **Technical Sessions** – Expert-led workshops focused on electronics and emerging technologies.
- **Circuit Crusade** – A competition designed to strengthen core fundamentals in electronics and circuit design.
- **Idol of ECE** – A circuit-based technical contest recognizing outstanding student talent.
- **100 Days – 50 Projects** – An intensive initiative motivating students to complete 50 innovative projects in domains such as VLSI, Embedded Systems, and Core Electronics within 100 days.

Clubs Under PULSE

- **Embedded & IoT Club** – Advancing smart systems and connected solutions.
- **Always VLSI Club** – Inspiring innovation in semiconductor and chip design.
- **Robotronics Club** – Exploring robotics and automation through teamwork and creativity.
- **Nanotron Club** – Promoting curiosity and research in nanotechnology and advanced materials.



Research Laboratory Infrastructure Spotlight

Network Server Rack



R205A

A Network Server Rack is a cabinet designed to store and organize networking and server equipment in a secure and systematic way. It can hold devices such as network switches, routers, patch panels, servers, power supply units, and other communication equipment. The rack provides a central location for connecting and managing different devices in a network. It also helps with proper cable management, ventilation, and protection of the equipment from accidental damage. Since the devices are arranged neatly inside the rack, troubleshooting, maintenance, and upgrading of network components become much easier.

Applications:

- Used to install and organize servers and networking devices.
- Used in computer labs, data centers, offices, and communication labs.
- Helps in network connectivity and distribution between multiple computers and devices.
- Provides safe storage, easy maintenance, and proper cable management for network equipment.

5NR-5G-IoT Bridge

A 5NR-5G-IoT Bridge is a communication device used to connect IoT devices and local networks with 5G-based wireless networks. It acts as a bridge between different network interfaces, allowing data to be transferred from connected devices to a 5G network and vice versa. The multiple antennas help in wireless signal transmission and reception, improving connectivity and network performance. It is mainly used in laboratories for studying 5G communication, IoT networking, wireless data transfer, and network configuration. It also helps students understand how IoT devices can communicate through modern cellular networks.



R205A

Applications:

- Used for 5G and IoT communication experiments in laboratories.
- Helps connect IoT devices and sensors to wireless networks for data transfer.
- Used to study 5G network performance, connectivity, and communication.
- Can be used for testing applications such as smart homes, industrial IoT, smart cities, and remote monitoring systems.

Virtual Reality (VR) Headset

A Virtual Reality (VR) Headset is a wearable device that creates an immersive digital environment for the user. The headset contains a display and tracking sensors that detect the movement of the user's head, while the handheld controllers are used to interact with objects inside the virtual environment. It allows users to experience and control computer-generated 3D environments as if they were physically present in them. VR systems are widely used for simulation, training, education, gaming, and research.



R205A

Applications:

- Used for virtual simulations and training in engineering, medical, and industrial fields.
- Used in education and research to provide interactive 3D learning experiences.
- Used for gaming and entertainment to create immersive virtual environments.
- Used for 3D visualization and virtual prototyping of products, buildings, and engineering designs.

DEPARTMENT HIGHLIGHTS

Building the Future of Quantum Technology

The Department of Electronics & Communication Engineering proudly highlights the MoU signed between KL University and Quantum AI Global at the Vaddeswaram Campus. The collaboration focuses on emerging technologies, research, innovation, new product development, technology transfer, joint research and publications, and sharing of research facilities. The partnership also explores the establishment of a dedicated Quantum Laboratory and specialized Quantum courses at KL University, creating new opportunities for students in this emerging field.



Learning from Global Expertise

ECE welcomed international faculty members during the Foreign Faculty Visit programme held from 10–14 August 2026. The visiting faculty shared their expertise in diverse areas including Embedded Systems, AI & ML, Digital Communications, Energy Harvesting, VLSI, and other emerging technologies. The interactions provided students with valuable exposure to global perspectives, current technological developments, and new areas of learning, strengthening the department's international academic engagement.

Foreign Faculty				
S. No.	Name of Professor	Subject	University	Year
1	Dr. Malathy Batumalay	Embedded Systems & Cloud Computing	INTI International University, Malaysia	2026-27
2	DR. SARAJU MOHANTY, VISITING FACULTY	AI & ML	University of North Texas, USA	2023-24
3	DR. PUNYAWI JAMJAREEGULGARN, VISITING FACULTY	DIGITAL COMMUNICATIONS	King Mongkut's Institute of Technology Ladkrabang, Thailand	2023 - 2024
4	DR. BHASKAR DUDEM, VISITING FACULTY	ENERGY HARVESTING & AUTONOMOUS SENSING	UNIVERSITY OF SURREY, UNITED KINGDOM	2022 to Till date
5	DR. GOLINAGARAJU, VISITING FACULTY	3D PRINTING	EMPERIAL COLLEGE, LONDON, UNITED KINGDOM	2022 to Till date
6	DR. GIAN CARLO CARDARILLI, VISITING FACULTY	VLSI	University of Rome Tor Vergata, Italy	2022 to Till date
7	DR. MD. GOLAM MOSTAFA, VISITING FACULTY	ANALOG AND DIGITAL COMMUNICATION	Military Institute of Science and Technology, Dhaka, BANGLADESH.	2022 - 2023
8	DR. S. R. SRITHER, VISITING FACULTY	ENERGY HARVESTING	SOUTHERN UNIVERSITY OF SCIENCE AND TECHNOLOGY, SHENZHEN, CHINA	2021 to 2022
9	MR. KHANAL MADHAV PRASAD, FULL-TIME FACULTY	EMBEDDED CONTROLLER	NA	2017 to 2021
10	DR. GERALD SOBELMAN	VLSI	UNIVERSITY OF MINNESOTA	2012-2013
11	DR. RAMAKRISHNA JANASWAMY	ELECTRO MAGNETIC FIELDS & WAVES	UNIVERSITY OF MASSACHUSETTS, USA	2011-2012
12	DR. RAMAKRISHNA JANASWAMY	ELECTRO MAGNETIC FIELDS & WAVES	UNIVERSITY OF MASSACHUSETTS, USA	2010-2011
13	PROF. SIDNEY BURRIS	ADVANCED SIGNAL PROCESSING	RICE UNIVERSITY , USA	2010-2011

Exploring Advanced Semiconductor Technologies

The Department of Electronics & Communication Engineering organized a one-day online technical workshop on Synopsys Semiconductor Design and Simulation Solutions on 10 July 2026. The programme introduced participants to EDA, Sentaurus TCAD, and QuantumATK, with expert sessions focusing on semiconductor material and device modelling, process and device simulation, and Electronic Design Automation. The workshop provided students, faculty, and research scholars with valuable exposure to advanced semiconductor technologies and industry-oriented simulation tools.

One day Workshop (online) on

TECHNICAL SESSION ON SYNOPSYS SEMICONDUCTOR DESIGN AND SIMULATION SOLUTIONS COVERING EDA, TCAD (SENTAURUS), AND ATOMISTIC MATERIALS MODELING (QUANTUMATK)

1. Advanced Semiconductor Material and Device Modeling with Synopsys QuantumATK software

Speaker:- Er. Deepak Upadhyay,
Principal Application Engineer, Integrated Microsystem

Time: 10.00 – 12.00 PM



2. Advanced Semiconductor Process and Device Simulation with Synopsys Sentaurus TCAD

Speaker:- Er. Sachin Yadav
Application Engineer, Integrated Microsystem

Time: 2.00 – 3.00 PM



3. Technical session on Synopsys Electronic Design Automation (EDA) solutions

Speaker:- Mr. Atul Kumar Srivastava,
Application Engineer, Integrated Microsystem

Time: 4.00 – 5.00 PM



10 JULY 2026 | 10 AM Onwards

Mode: Online

Workshop Coordinators:

Dr. Chella Santhosh
Associate Professor,
Dept. of ECE

Dr. S. Vamsee Krishna
Assistant Professor,
Dept. of ECE

Register here:
<https://forms.gle/uPNmxcsXnaMpce2D7>

All faculty, research scholars, students of all the campus can register & attend the same.

Note
E-Certificates will be provided to all registered participants.

Organized by **Department of ECE**, in Association with **Academic Staff College (ASC)**, KLEF, Vijayawada.

Advancing Hands-On Learning

The Department organized a DST PURSE-sponsored one-day hands-on workshop on “Thin Film Preparation & Characterization Tools” on 16 July 2026. Held at the New Seminar Hall, the programme offered practical exposure to Atomic Force Microscopy, Electron Microscopy, DC/RF Magnetron Sputtering, Semiconductor Processing Tools, and PCB Prototype Machines. Expert sessions and laboratory demonstrations helped participants strengthen their understanding of thin-film preparation, nanoscale characterization, semiconductor processing, and advanced laboratory technologies.



KL
DEEMED TO BE
UNIVERSITY



विज्ञान एवं प्रौद्योगिकी विभाग
DEPARTMENT OF
SCIENCE & TECHNOLOGY
SR/PURSE/2023/196

LABINDIA
INSTRUMENTS
AIMING FOR THE BEST

Park
SYSTEMS

DST PURSE SPONSORED

— ONE DAY HANDS-ON WORKSHOP —

THIN FILM PREPARATION & CHARACTERIZATION TOOLS



16 JULY 2026



9:30 AM – 5:00 PM



**NEW SEMINAR HALL,
KL DEEMED TO BE UNIVERSITY**

ABOUT THE WORKSHOP

This workshop offers a comprehensive introduction to thin-film deposition, advanced characterization techniques and semiconductor processing tools. Participants will gain insights into state-of-the-art instruments including AFM, Electron Microscopy, Sputtering Systems and PCB Prototype Machines through expert talks and hands-on laboratory demonstrations.

The program aims to provide practical exposure to thin film preparation, nanoscale imaging, semiconductor processing and device fabrication techniques with interaction from industry experts.

WORKSHOP HIGHLIGHTS



Atomic Force Microscopy (AFM)



DC/RF Magnetron Sputtering



Electron Microscopy



PCB Prototype Machine



Semiconductor Processing Tools



Hands-on Laboratory Demonstrations



Interaction with Industry Experts

TECHNICAL PROGRAMME

TIME	TOPIC	SPEAKER / DETAILS
09:30 – 10:00 AM	Registration & Kit distribution for registered participants.	—
10:00 – 10:40 AM	Welcome Note & Introduction to exploring the R&D facilities @ KLEF – KL University, Labindia & Park Systems	Dr. Venkatesan, Labindia Instruments Dr. B.T.P. Madhav, KL University Mr. Raviprasad, Park Systems
10:40 – 11:20 AM	Talk 1 : Introduction to AFM Operations and Correlative Studies	Dr. Sebarigresan Application Scientist, Park Systems
11:20 – 11:30 AM	Tee Break	—
11:30 – 12:10 PM	Talk 2 : Exploring Advanced Materials with Nanoscale Imaging Solutions Using Electron Microscopy	Mr. Rajagopal National Product Manager, Labindia Instruments
12:10 – 12:50 PM	Talk 3 : Introduction to Semiconductor Processing Tools	Dr. Venkatesan Senior Product Specialist, Labindia Instruments
12:50 – 01:00 PM	Group Photo and Closing Remarks	Mr. Hemant Gourkar Sr. General Manager, Labindia Instruments
01:00 – 02:00 PM	Lunch Break	—
02:00 – 03:30 PM	Lab Demo Batch I (10–15 members) Thin-film preparation @ DC/RF Sputtering and Device preparation @ PCB Prototype machine	Park AFM Team
03:30 – 05:00 PM	Lab Demo Batch II (10–15 members) Thin-film preparation @ DC/RF Sputtering and Device preparation @ PCB Prototype machine	Park AFM Team

PAYMENT / BANK DETAILS

Account Name : KL University - Sponsored Research Funds/(KLU-SR-036)

Account Number : 62434363674 | IFSC Code : SBIN0021361

Bank Name : State Bank of India | Branch : KL University Branch

ORGANIZING COMMITTEE

KL UNIVERSITY

Convenor
Dr. B.T.P. Madhav, Dean (R&D), KLEF

Co-ordinator
Dr. S. Arunmetha, Associate Dean,
R&D – Sponsored Research

Co-ordinator
Dr. V. Vivekanathan, Associate
Professor, IRD

LABINDIA INSTRUMENTS

Convenor
Mr. Hemant Gourkar,
Sr. General Manager

Co-ordinator
Dr. Venkatesan,
Senior Product Specialist

Co-ordinator
Mr. Muthupandi,
Territory Sales Manager

REGISTRATION DETAILS



REGISTRATION FEE

₹ 300

PER PARTICIPANT



LAST DATE TO REGISTER

13 JULY 2026



LIMITED TO

40 PARTICIPANTS

SELECTION ON A FIRST-COME, FIRST-SERVED BASIS

CONFIRM YOUR REGISTRATION NOW!

SCAN TO REGISTER



FACULTY CORNER

Faculty Achievements

The Department of Electronics and Communication Engineering proudly recognises the remarkable accomplishments of its faculty members, reflecting its continued commitment to academic excellence, research advancement, and holistic development.

A Mark of Academic Excellence

The Department proudly congratulates **Dr. Rakim Guha (ECE)** on being recognized as the **Best Library User for 2025–2026** by the Central Library, KL (Deemed to be University). This achievement reflects his commitment to learning, effective use of academic resources, and pursuit of excellence.



Strengthening Global Connections



ECE applauds Dr. Ashish Kumar, Assistant Professor, for his academic visit to **INTI International University, Kuala Lumpur, Malaysia**, supporting 27 students during their Semester Abroad programme and strengthening international university collaborations.



Research Beyond Boundaries

A proud research moment for ECE! Venkata Ratnam Devanaboyina successfully presented his research paper on GNSS-based TEC Gradient Measurement Techniques at ICSSIT 2026, held at SR University from 28–30 July 2026.

Leading with Academic Excellence

The Department of Electronics & Communication Engineering proudly congratulates Dr. Venkata Kishore Kothapudi, Assistant Professor, KLEF, for representing the university at the IEEE SPACE 2026 International Conference, held from 19–21 July 2026 at Bengaluru.

Dr. Kothapudi served as the **Chair of the New Initiatives Track (NIT)**, coordinating flagship programmes including the **3-Minute Thesis (3MT)**, **Young Faculty Laureate Program (YFLP)**, **B.Tech Initiative**, and **M.Tech Initiative**. His dedicated contribution to the conference reflects his commitment to academic leadership, innovation, and professional excellence.

ECE celebrates this notable contribution and achievement!



Government, Academia and Industry Come Together at KL University to Promote Amateur Radio and Wireless Technology

WMS Vijayawada, Department of Telecommunications, Government of India, in collaboration with the Department of ECE, KL University, organized a One-Day Seminar on Amateur Radio (HAM Radio) on 19 August 2026.

The seminar introduced students to wireless communication, emergency communication, satellite communication, RF technology and community service. Shri S. Tarachand, CCA, Andhra Pradesh and Telangana, graced the programme as Chief Guest.

Experts discussed HAM Radio licensing, emergency communication, satellite communication, digital modes and career opportunities. Live demonstrations provided students with practical exposure to Amateur Radio equipment and communication systems.

The programme encouraged students to explore Amateur Radio as a platform for technical learning, innovation and public-service communication.





Learning from Global Expertise

The Department of ECE, in association with the Office of International Relations, organized an **International Visiting Professor Program from 10–14 August 2026** featuring **Dr. Malathy Batumalay, INTI International University, Malaysia**.

The programme focused on **Embedded Systems, IoT, Cloud Computing, Edge Computing and Data Analytics**, providing students with valuable international academic exposure.

Students and faculty participated in **interactive lectures, research discussions, case studies and problem-solving activities**. Emerging applications and technologies, including Industry 4.0, AI-enabled embedded systems and Edge-AI, were also explored.

The programme strengthened **international academic collaboration** and enhanced students' technical knowledge and global outlook.



मेरी कहानी

मेरी कहानी है मुझको सुनानी, तू भी सुन ले खुदाया।
जान के खुद को न जानूँ मैं तुझको, यही डरा हूँ मैं भाया।

यादों के मेले सारे झमेले,
न कोई अपना, नाही पराया।
आती हुई रातें, बीते गये दिन पर,
ये वक़्त ने ही मुझको सताया।

बेचैनी बड़ी है, कटते नहीं पल,
पता नहीं क्या नहीं पाया।
हवा के झोंके, पलकों के झरोखे,
कुछ भी तो नहीं मुझको भाया।

मिल भी अब जा तू,, छिपा है जो मुझमें,
क्यों ही मुझको रुलाया।

ज़िंदा भी हूँ मैं और मरा हुआ भी,
जागा हुआ हूँ, पर सोया हुआ भी।
सपनों में हूँ मैं और हकीकत भी मैं ही,
माया से मोहित इस काया को,
क्यों ही तूने जगाया।

डॉ. आशीष कुमार

सह - आचार्य
इ.सी.इ. विभाग

The author expresses a deep inner conflict and an intense search for the self. He feels lost somewhere between memories, dreams, and reality, unable to understand what he has truly gained or lost in life. Though alive, he feels emotionally lifeless; though awake, he feels as if he is still asleep. He longs to meet and understand the true self hidden within him, questioning why life has awakened him from the illusion of Maya, only to leave him restless, lonely, and in pain. At its heart, the poem is a journey of self-discovery, loneliness, existential confusion, and the longing to understand one's true identity and purpose in life.

Melancholy of Memories

I once had dreams that soared beyond the sky,
To wear the nation's colours, proud and high.
A fighter's roar would set my heart aflame,
And serving Mother India was my aim.

Three times the door of destiny drew near,
Three times I stood within a breath of cheer.
So close the dream, yet slipping from my hand,
I watched my brightest sunrise leave the land.

Now every uniform awakens what I hide,
A silent ache that never truly died.
A fighter circling through the evening blue,
Brings back the boy whose dream was bold and true.

The training flights that thunder overhead,
Revive the words my younger heart once said.
"Perhaps one day..." – that promise still remains,
A distant echo walking through my veins.

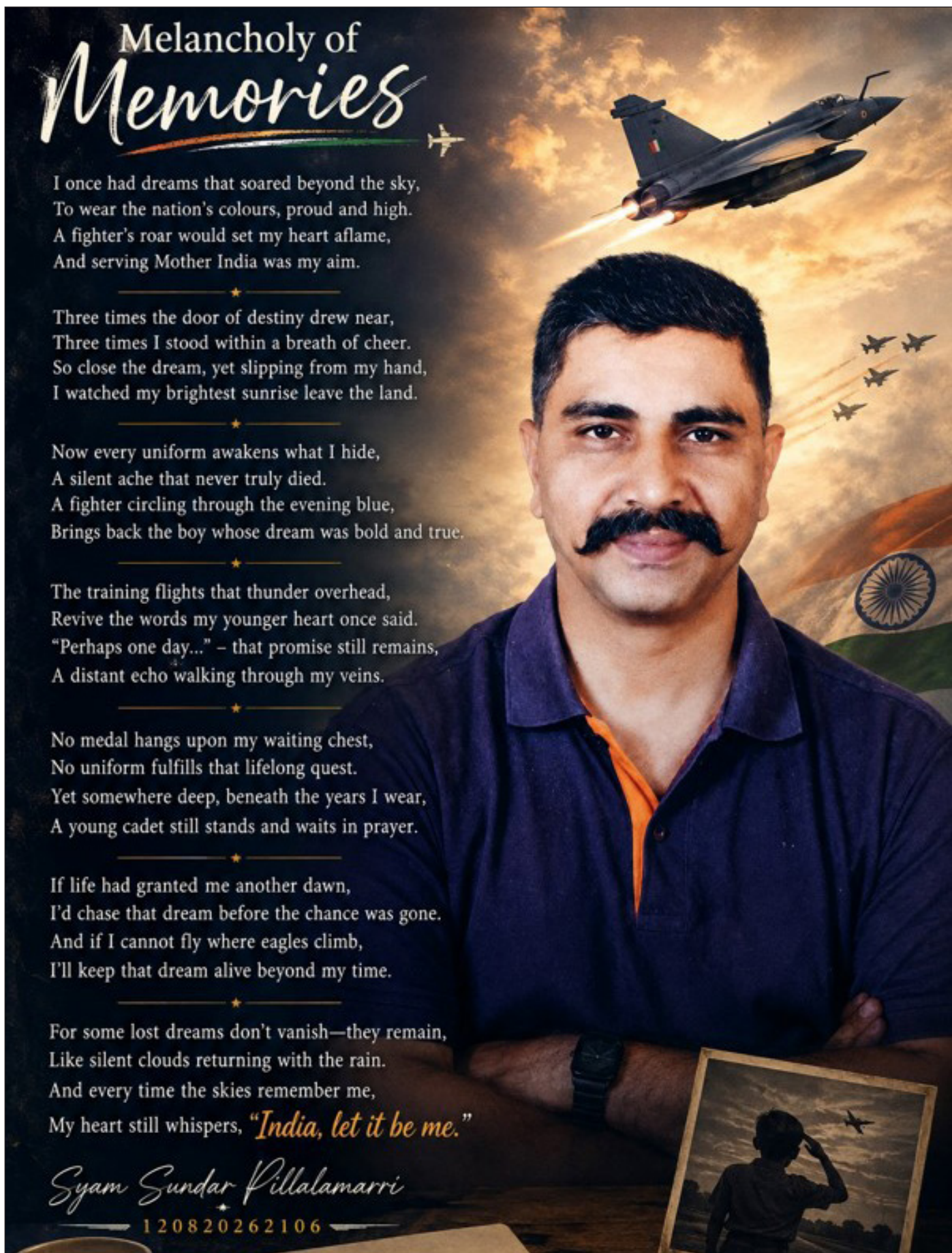
No medal hangs upon my waiting chest,
No uniform fulfills that lifelong quest.
Yet somewhere deep, beneath the years I wear,
A young cadet still stands and waits in prayer.

If life had granted me another dawn,
I'd chase that dream before the chance was gone.
And if I cannot fly where eagles climb,
I'll keep that dream alive beyond my time.

For some lost dreams don't vanish—they remain,
Like silent clouds returning with the rain.
And every time the skies remember me,
My heart still whispers, *"India, let it be me."*

Syam Sundar Pillalamarri

120820262106



Student Corner

Student Achievements

Our students and research scholars continue to make significant strides at national and international platforms, reflecting the department's vibrant research culture and commitment to excellence.

Turning Ideas into Innovation

ECE student Mabbu Rohitha showcased an Alcohol Detection System at a Project Expo held at ESC Government Polytechnic College, Nandyal, on 7 December 2024. The project provided an opportunity to demonstrate technical innovation and practical problem-solving skills. The team received a certificate of participation/recognition for the project expo.



Serving Beyond the Classroom

Aishwarya E. (Y24) was recognised for completing the NSS Special Camp at Pathuru. Along with her participation in the camp, she also contributed as an anchor during the programme. Her recognition reflects active involvement in community-oriented activities and the spirit of social responsibility.



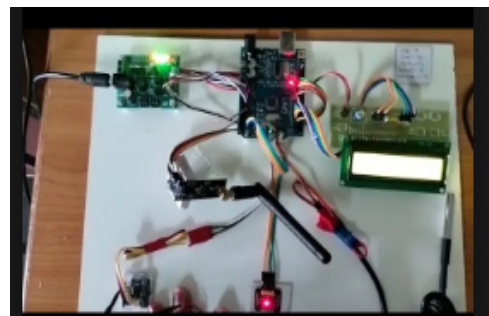


Learning Through Industry Exposure

ECE student Manikanta Chennuboyina (Y25) completed an internship at **Raga Tech**, with exposure to product development. The internship provided an opportunity to gain practical industry experience and understand the application of technical knowledge in a professional environment.

Innovation for Better Healthcare

ECE student Dantha Karuna Kumari (Y25), along with her team members **Dekshitha, Vyshnavi, and Lakshmi**, developed a **Health Monitoring System Using Antennas**. The project was presented at **SMVM Polytechnic on 20 March 2026**. The project successfully demonstrated the team's efforts towards applying electronics and antenna technology to healthcare-oriented solutions.



Students Behind this newsletter

Academics Wing

Wing Advisors: Navdeep (2300040064)

Wing Members: Srinivasulu (2400040107)

Eswar (2400040152), Jai Kishan (2400040115)

Lab & Instruments Wing

Wing Advisors: Sai Swaroopa (2300040038)

Wing Members: Kavya (2400040197)

Rajeshwari (2400040060)

Student Activities Wing

Wing Advisors: Sukeshwaran (2300040266) & Karthik (2300040094)

Wing Members: Yashvanth Kumar (2400040031)

Abhiram (2400040026)

Research & Faculty Wing

Wing Advisors: Ramana (2300040248)

Wing Members: Gowtham (2400040082)

Lakshmi Kumari (2400040296)

“Together, we continue to innovate, inspire, and lead the future of technology”

nirf NATIONAL INSTITUTIONAL
2025 RANKING FRAMEWORK
(Ministry of Human Resource Development, Govt. of India)



Includes IIT's, IIM's, IIIT's, IISc, NIT, State & Central Govt. Institutions

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Ministry of Education, Government of India

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