

VELAMMAL COLLEGE OF ENGINEERING AND TECHNOLOGY (AUTONOMOUS), MADURAI

THE WINDOWS

KNOW EVERYTHING ABOUT YOUR DEPARTMENT

So many sucess stories about to be told

WHERE DREAMS TURN INTO REALITY.

Where time passes

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

by..but memories do not stop.

EDITION: 2025-2026



VELAMMAL COLLEGE OF ENGINEERING AND TECHNOLOGY (AUTONOMOUS) MADURAI

GOLDEN GOALS OF VCET

- 1.Regularity & Punctuality.
- 2.Nil Failures, High Subject Average & More Centums.
- 3.Research & Development.
- 4.Focus in General Knowledge & Depth in the Subject.
- 5.Communication Skills (Spoken English & Learning more Languages).

6.Extracurricular Activities & Co-Curricular Activities (Allaround Development).

7.Good Health and Food Habits.

8. Human Values.

VISION AND MISSION OF THE INSTITUTE

VCET vision is to emerge and sustain as a center of excellence for technical and managerial education upholding social values.

MISSION OF VCET

Our aspirants are

- Imparted with comprehensive, innovative and value based education.
- Exposed to technical, managerial and soft skill resources with emphasis on research and professionalism.
- Inculcated with the need for a disciplined, happy, married and peaceful life.

CHAIRMAN'S MESSAGE



Every young Indian of this great country should dream big!. It is not enough if they only dream, but they should work hard to make it a reality. We at Velammal College of Engineering and Technology, Madurai, provide the necessary platform to many aspiring youths of this region to become very enterprising Engineers, so that they could provide the right kind of engineering solutions to propel our nation to greater heights. We sincerely believe in imparting quality engineering education laced with deep social values to ensure that every individual who is graduated from our Institution not only become a competent Engineer but also a very responsible citizen. It is high time that we got away from the age old practice of "standardized testing to "creative teaming" It has been our earnest endeavor to produce such Engineers who could offer very creative

solutions. Life would not provide any warranties and guarantees and it provides only challenges and opportunities. We want all our budding Engineers to remember this and make the best use of them. We are on an incredible journey and we expect every Velammalian to do the right thing, at the right time, the right way and for the right reason". Please come and join us in our exhilarating journey.

Shri.M.V.Muthuramalingam, Chairman Velammal Educational Trust

PRINCIPAL'S MESSAGE

"Branding is the art of becoming knowable, likable and trustable". As per John Jantsch words, VCET is a known, liked and trusted technical Institution in Madurai. VCET vision is to emerge and sustain as a center of excellence imparting technical and managerial skills to the southern district students of Tamil Nadu inculcating soft skills to brand as a professional Engineer. From its inception in 2007, various accreditations with NAAC, NBA has been achieved. The attracting feature of VCET is its infrastructure and state-of-the-art laboratories. VCET faculty members are highly experienced and committed to provide comprehensive technical education. The system established in this college ensures that the engineering professionals graduating from VCET are capable of meeting the global standards. Consistent campus placements and our alumni occupying premier positions in the leading organizations worldwide, stand as a testimony to the quality of education imparted in our Institution. I proudly share that, I am a part of VCET and being the Principal of the Institution makes me always creative, analytical and innovative in ideas and implementing the same.



Dr.P.Alli, Principal

HOD'S MESSAGE



Dr.S. Vasuki, Dean (Research and Development), Head/ECE

A hearty welcome to the Department of Electronics and Communication Engineering, Velammal College of Engineering and Technology, Madurai. Since its inception in 2007, the department of ECE has been the front runner in imparting quality technical education to the students. The department has well qualified and motivated faculty members passionate towards moulding the younger generation. The rich technical ambience, highly enthused faculty members, state of the art laboratories and the able support from the management have made the students perform with distinction in the career pursuit. Moreover, the department of ECE is making huge strides in Research and Development. It has procured funded projects from DRDO, AICTE and DST to the tune of Rs 3.1 crores. Students relish the placement in top Multinational companies like TCS, CTS, Wipro, Accenture, Aricent, HP, UST Global, Zoho, Athena Healthcare etc., The department also has a

worldwide reach with its vibrant alumni network. Working shoulder with shoulder with the institution, it is constantly aiming towards reaching greater heights to serve the needs of the society and meet the aspirations of the student community.



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING





To emerge as a vibrant centre of repute, moulding students to excel in Electronics and Communication Engineering with ethical responsibility.

MISSION

To excel in producing competent Electronics and Communication Engineering professionals by

•Imparting strong theoretical background in the fundamental concepts.

•Providing self directed learning opportunities to meet a variety of career choices.

•Training students to realize ethical and environmental responsibilities for the betterment of mankind.

•Entailing the students in Research and Development activities.

Program Specific Outcomes (PSOS)

PSO I: Apply the knowledge of mathematics, physics, chemistry, electronics and communication to solve complex engineering problems in Electronic Devices and Circuits, VLSI, Embedded systems, Analog & Digital communication and other associated topics.

PSO II: Select and apply modern engineering hardware and software tools to

analyze complex Electronics and Communication engineering problems.



ASSOCIATION SQUAD



Dr.S. Vasuki, Dean (R&D), Head/ECE, Convenor (ECE Association)



Mr.A. Suban Asst. Prof /ECE, Staff advisor (ECE Association)



Ms.A. Alaimaahal Asst. Prof /ECE, Staff advisor (ECE Association)





OFFICE BEARERS

SECRETARIES

SHABESH S (III ECE A) KISHOR M (III ECE B)

JOINT SECRETARY

PRAVEEN KUMAR M (III ECE A) JEFRY ESSAC G (III ECE B) SEEMA FARHANA M (III ECE A) SAMIKSHA S (III ECE B)

STEERING COMMITTEE MEMBERS

DRAVID SK (III ECE A) SUDHARSAN M (III ECE B)

DIVYASHREE K (III ECE A) HARSHA D (III ECE B)

JOINT STEERING COMMITTEE MEMBERS

RANJITH KUMAR R (II ECE A)

SASIKUMAR B (II ECE B)

SIVARAMAN S (II ECE C) KARTHIGA DEVI J (II ECE A)

SAHITYA GM (II ECE B)

KEERTI YOGA V (II ECE C)

EVENTS TO BE CONDUCTED 2025-2026 (ODD SEMESTER)

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S.NO	Date	Name of the event
1	08.07.2025	Appointment of Office Bearers
2	17.07.2025	ECE Association Inauguration
3	17.07.2025	Release of Department Magazine "The Window"
4	21.07.2025	Workshop on Interview Cracking Skills, Attitude and Behavior Development
5	28.07.2025	Literary Events Essay Writing Contest (II - ECE)
6	28.07.2025	Literary Events JAM, A Talk Show (II - ECE)
7	29.07.2025	Literary Events Quiz Contest (II - ECE)
8	11.08.2025	Circuit Building Competition
9	23.08.2025	Seminar on "AI and its Applications" by Alumni of ECE Department
10	28.08.2025	VCET-ECE APP Challenge Contest
11	30.08.2025	One Day Hands on Training on "Ocean Optics Spectrometers" in association with COMTEK Scientific Instruments, Bengaluru
12	04.09.2025	Teachers Day Celebration
13	12.09.2025	Short Film Contest on theme "Entrepreneurship through Startups and its Marketing Strategies"
14	27.09.2025	State Level ML/DL based Coding contest for ECE Applications
15	30.09.2025	Poster Presentation Contest on topic "Antenna for Autonomous Vehicles"
16	10.10.2025	Guest Lecture I: Current Trends in Industries and Focus towards Industry 4.0 by Industry Expert

2025-2026 (EVEN SEMESTER)

S.NO	Date	Name of the event
17	20.01.2026	Adzap Contest
18	30.01.2026	Dr. S. R. Ranganathan Trophy Contest in association with VCET Central Library
19	07.02.2026	Intradepartmental Paper Presentation Contest
20	20.02.2026	Multimedia Presentation contest on theme "Chip Level Testing and Debugging for Smartphones and Tablets"
21	23.02.2025	Guest Lecture - II: Careers and Opportunities in Government Sectors
22	28.02.2026	Leader Talk on "Break the Barrier"
23	02.03.2026	Guest Lecture III: Emerging Trends in Embedded Systems and IoT Technologies
24	13.03.2026	LAN Gaming Contest
25	23.03.2026	An Expert Talk on "National Educational Policy"
26	28.03.2026	State Level Hackathon Contest on theme "5G and Beyond"
27	30.03.2026	Project Expo by final year
28	02.04.2026	Physical fitness training programme in association with Physical Education Department of VCET
29	10.04.2026	Awareness Programme on "Traffic Rules and Road Safety" by NCC cadets
30	13.04.2026	ECE Association valedictory

PROJECT CORNER



Enhancing body detection in CSSR Operations Using Advanced Technology

Natural disasters like landslides, floods, and cyclones often cause loss of life and property due to the lack of real-time visual data. This project proposes an Integrated Disaster Monitoring System using a DJI Matrice 300 RTK drone equipped with multiple sensors and real-time 5G data transmission. The goal is to support search and rescue (CSSR) operations by enhancing victim detection and environmental analysis in disaster- prone areas.



Technology:

- Integrated Sensors: Uses LiDAR, GPR, acoustic vector sensors, thermal camera (FLIR BASON 640), and gas sensors for multispectral detection.
- Drone & Software: DJI Matrice 300 RTK integrates sensors via DJI SDK and streams real-time geospatial and thermal data to dashboards.
- Image & Signal Processing: Applies signal enhancement and feature extraction to detect bones through GPR and thermal imaging patterns.
- Machine Learning & Federated Learning: Implements ML and federated learning on edge devices for real-time victim/bone detection without centralized data.

Applications:

- Search and Rescue Operations (CSSR): Enhanced body detection amidst debris and rubble after earthquakes, floods, or landslides. Disaster Area Mapping: High-res 3D mapping for rapid assessment of affected areas.
 Real-Time Victim Localization: Using thermal imaging and GPR to locate trapped individuals. Hazard Detection: Detecting dangerous gas leaks, heat signatures, and unstable terrain. Remote Monitoring Platforms: Live data streamed to mobile/web platforms for control centers.
- Training Autonomous Disaster Response Systems: Enabling drones to operate without human intervention in real-time situations.

BY Viswa Shanker R S- IV B Nivash V - IV B Karthikeyan K V - IV B

"Unified Wearable System for Asthma and **COPD (ACOS) Monitoring**"

The ACOS Monitoring System is a wearable device designed to monitor asthma and COPD patients by tracking heart rate, breathing patterns (via chest movement), and environmental conditions. It leverages IoT and machine learning to provide real-time alerts and enable remote health monitoring



Technology:

- Embedded Systems: The ESP32 microcontroller collects real-time data from health sensors and performs initial preprocessing.
- IoT Integration: Sends data to Firebase via Wi-Fi for cloud storage and remote access Machine Learning: An LSTM model, trained in Google Colab, analyzes breathing and heart rate data to classify patient condition into Normal, Warning, and Critical stages; deployed on a remote server for scalable processing.
- Mobile App: A companion application receives both raw and processed health data, providing users with visual insights, alerts, and trend tracking. Alert System: Continuously monitors key vitals and automatically triggers alerts to caregivers or emergency contacts when health parameters cross critical thresholds.

Applications:

- Health Monitoring: Continuously tracks vitals to prevent asthma/COPD attacks. Early Alerts: Warns patients during exertion and issues critical alerts in emergencies.
- Remote Monitoring: Enables home-based care for elderly or rural patients. Peace of Mind: Reduces hospital visits and reassures both patients and caregivers.

BY:

SRIVASTHAN S (III B) SANTOSHI T V (III A) **DHIVYA DHARSHINI B (III B)** SUDHARSAN M (III B) DANUSH KUMAR B (III B)

"AI-Driven Prosthetic Arm Using Computer Vision and Embedded Systems"



This project showcases a low-cost, functional bionic prosthetic arm designed to mimic human hand gestures in real-time. It uses computer vision to recognize hand signs shown to a laptop camera and replicates them using servo-driven finger movements. The project aims to support amputees and explore human-machine interaction using affordable, accessible technology.

Technology:

- Computer Vision: Utilizes a live camera feed to detect and interpret hand gestures using image processing and recognition algorithms. Embedded Systems: Microcontrollers process gesture data and control servo motors to drive the robotic arm's movements.
- String-Based Biomechanics: Employs tendon-like string mechanisms to replicate the natural flexion and extension of human fingers.
- Real-Time Control: Ensures minimal delay between gesture detection and robotic arm response, allowing seamless and instant mirroring.

Applications:

- Prosthetic Aid: Helps amputees perform basic hand functions using natural gestures.
- Rehabilitation: Assists patients in hand therapy by replicating motion patterns. Gesture-Controlled Robotics: Can control machines remotely through hand signs.
- Educational Tool: Demonstrates integration of AI, embedded systems, and robotics. Sign Language Replication: Can be extended to interpret **AKSHAYA K P (III A)** and convert hand signs.

HARINI V (III A) YUGASHREE A (III A)

BY:

"Step safe : Smart Shoes for Visually Impaired"

The Smart Shoes for the Blind project is an innovative wearable solution designed to assist visually impaired individuals by detecting nearby obstacles and providing real-time alerts. The system integrates multiple technologies to enhance mobility and ensure user safety through tactile and auditory feedback mechanisms.



Technology:

- Embedded Systems: The Arduino microcontroller is programmed to handle all operations, including sensor reading, signal processing, and output control. Ultrasonic Sensing: Offers reliable and real-time detection of objects at various distances, ensuring early warning of obstacles.
- Bluetooth Communication: Sends obstacle detection data to the user's smartphone. A mobile app or voice assistant reads out messages like "Obstacle Detected", providing an audio alert through earbuds or speakers.
- Vibration Feedback: A small motor vibrates when an obstacle is detected, allowing users to sense danger without needing to rely on hearing alone. This is especially helpful in noisy environments or for users with partial hearing loss.

Applications:

- Mobility Aid for the Visually Impaired: Helps users move safely in both indoor and outdoor environments, reducing their dependence on traditional aids like canes or guide dogs.
- Support for Elderly Individuals: Prevents tripping or falling incidents by alerting users to nearby objects or steps, especially useful in poorly lit or cluttered areas.
 Navigation in Hazardous or Low-Visibility Areas: Can be adapted for
- Navigation in Hazardous or Low-Visibility Areas: Can be adapted for use in dangerous settings such as warehouses, construction sites, or M.SHRINITHI (II A) mines, where visibility is limited and collision risks are high.

"AI-Powered Cough Analysis for Pneumonia Detection in Infants: A Lifeline for Rural Healthcare"

This project presents an AI-powered, non-invasive system that detects pneumonia in infants by analyzing their cough sounds. Unlike traditional diagnostics like X-rays or hospital visits, this system enables quick, contactless, and cost-effective pre- screening, especially useful in rural and low-resource settings.

Technology:

- Audio Preprocessing: Removes noise, isolates cough events, and normalizes sound for consistent analysis. MFCC Features: Extracts time-frequency patterns that mimic human hearing, converting cough audio into feature vectors.
- AI Models (CNN & LSTM): CNNs detect spatial features; LSTMs capture time-based patterns for accurate pneumonia detection.
- Deployment: Runs offline on mobile apps and edge devices like Raspberry Pi, ideal for rural and low-resource settings.

Applications:

- Infant Health Screening in Rural and Low-Resource
- Settings Telemedicine and Remote Diagnosis Support
- Triage Tool During Outbreaks and Health Emergencies
- Scalable for Other Respiratory Illnesses

BY: BEULA G (II C) SHIVANI K (II C) DHARSHINI S (II C) ANGELA M (II C) YOGESHWARI B (II C)

Spotlight on Excellence



Prize winner of circuittrix contest at Thiagarajar college of Engineering





Prrize winners of project contest at Ramakrishna college of

Engineering



Young scientist award





Best Innovator Award

Student Internship

Our students were given the opportunity to intern at the "Airport Authority of India", Madurai, where they gained firsthand experience with advanced Electronic Communication and Navigation Systems used in Aviation. Observing radar operations, control tower procedures, and signal transmission gave them valuable exposure to real-time aerospace applications. This experience helped them connect core ECE subjects with high- reliability systems in live operational environment.





"Kudankulam Nuclear At the Power Plant", students were exposed to the inner workings of one of India's most sophisticated power generation facilities. They learned about Electronic Instrumentation used in reactor monitoring, control systems, and safety protocols. As faculty, we view this as a critical learning experience, providing students with a deeper understanding of in electronics high-stakes environments where precision and safety are Paramount.

Through their intenship at "Inesh Smart Energy" in Chennai, our students explored the latest in smart metering and loT-enabled energy systems. They observed Embedded how **Electronics**, Wireless Communication, and Data Analytics come together in modern energy solutions. This industry interaction, from our perspective, is essential in shaping their readiness for future innovations in smart grid and sustainable energy technologies.



FACULTY ARCAPE

Distributed Massive MIMO: Algorithm for TDD Reciprocity Calibration

THE CHALLENGE

Distributed Massive MIMO exploits diversity more efficiently and can potentially offer much higher probability of coverage, but still faces challenges of backhaul, synchronization, time division duplex (TDD), and reciprocity calibration. This work focuses on an algorithm to improve TDD reciprocity calibration for equally distributed co-located arrays.

THE SOLUTION

Distributed systems can be connected using two 32-antenna test beds to the main chassis with a 10-meter optical fiber cable. LabVIEW, the Communications Systems Design Suite, and the MIMO Application Framework are utilized. A hierarchical-based calibration method is employed to address the huge dynamic range between intra channel gain of intra-subarrays and subarrays. To increase diversity and array during intercluster calibration, gain maximum ratio combining and maximum ratio transmission can be applied. Therefore, unlike conventional methods, all multiple input single output (MISO) gain can be collected in one shot. Distributed during intercluster calibration, antenna arrays can be used to help decorrelate closely collocated users in both LoS and NLoS scenarios.

Based on the channel characteristics, Pilots can be efficiently assigned in two reduce cells pilot virtual and contamination. Frame structure modification with joint beamforming technique can also be used to reduce pilot contamination. With the virtual two-cell test bed, performance in the environment world real can be measured.



A two 32-antenna DM-MIMO BS station setup established in the KU Leuven Research Lab at Belgium. To enlarge the path-loss by blocking LoS in between the clusters, two absorbers were placed in

Expected outcome of the Research

Pilot contamination effect can be emulated using two cells that share the spectrum.

between the arrays.



Mr. A.SUBAN ASSISTANT PROFESSOR/ECE

Semiconductor Industry and its Growth in India

The semiconductor industry has emerged as a cornerstone of technological advancement, driving innovations across sectors like electronics, automotive, telecommunications and more. India, with its burgeoning economy and robust talent pool, is positioning itself as a pivotal player in the global semiconductor market. The country's initiatives to bolster domestic manufacturing, coupled with a growing demand for semiconductors, have created a unique blend of opportunities and challenges for the industry. India's semiconductor market is currently valued at approximately \$27 billion in 2023, with projections to reach \$64 billion by 2026, growing at a CAGR of 19%. This growth trajectory is supported by the government's aggressive push for domestic semiconductor manufacturing under the "Make in India" and "Atmanirbhar Bharat" initiatives.



Current Semiconductor Market Size and Growth in India

Rising Demand for Electronics

India's electronics market is projected to grow significantly, reaching \$400 billion by 2025. This surge in demand directly translates into an increased need for semiconductors, creating lucrative opportunities for domestic and international semiconductor companies.

Government Initiatives

The Indian government has announced a \$10 billion incentive program to promote semiconductor manufacturing and design. This includes:

- Production Linked Incentive (PLI) Schemes: Designed to attract investment in semiconductor fabs and assembly units.
- Semiconductor Mission: Aimed at establishing India as a global hub for electronics and semiconductors.

Strategic Partnerships

Collaborations between Indian and global semiconductor companies are fostering knowledge transfer; innovation, and investment. Companies like Vedanta-Foxconn and ISMC have announced plans to set up semiconductor fabrication plants in India.



Dr.P.Suveetha Dhanaselvam,

Professor/ECE



On the Land of Tokyo



India's Tokyo 2020 Olympics medal winners

Olympics Gold Medalist Neeraj Chopra became only the second Indian individual Olympic champion. PV Sindhu won her second Olympic medal while the men's hockey team won an Olympic medal after 41 years. **Weightlifter Mirabai Chanu** opened India's medal account at the Tokyo 2020 Olympics with a silver in the women's 49kg - her first medal at the Olympics. **Lovlina Borgohain - Bronze medal - women's welterweight (64-69kg)** On her Games debut, Lovlina Borgohain won a bronze medal.. **PV Sindhu - Bronze medal - women's singles badminton**

Badminton queen <u>PV Sindhu</u> became the first Indian woman and only the second Indian athlete - after Sushil Kumar - to win two individual Olympic medals. <u>Ravi Kumar Dahiya - Silver medal - men's 57kg freestyle</u> <u>wrestling</u> The 23-year-old Ravi Kumar Dahiya lost to twice world champion Zavur Uguev of ROC in the final of the men's 57kg freestyle wrestling, thus ending up with a silver medal. <u>Indian hockey team - Bronze medal - men's hockey</u>

After a 41-year wait, the Indian men's hockey team finally has an Olympic medal since the gold at the 1980 Moscow Olympics. **Bajrang Punia - Bronze medal - men's 65kg wrestling** Wrestler Bajrang Punia became the third Indian debutant to win a medal at Tokyo 2020. **Neeraj Chopra - Gold medal - men's**

javelin throw Neeraj Chopra became India's second individual Olympic champion - after Abhinav Bindra - with his men's javelin throw gold at Tokyo 2020. It was India's first track-and field medal at any Olympic Games. Neeraj Chopra threw 87.58m to wrap up the gold medal.

Bow to champs.....



Ms.A.Alaimahal, AP/ECE

ALUMNI CORNER



S VASANTH B.E., GRADUATE ENGINEER TRAINEE – HCL TECH

I am proud to represent the 2020–2024 batch of Velammal College of Engineering and Technology. I chose this institution primarily for its strong placement record, which continues to stand out year after year. Opting for the Electronics and Communication Engineering (ECE) department was a well-thought decision known for offering opportunities in both core and software domains. As I began exploring the field, I realized the vast technical knowledge it offers from embedded systems and VLSI design to signal processing and communication systems. I feel fortunate to have been part of a truly wholesome batch, with supportive friends and approachable, highly skilled faculty members. The guidance from our professors, especially during labs under Mr.A. Suban Sir and Mrs.A. Alai Ma'am, made learning both challenging and memorable labs wouldn't be complete without the iconic phrase, "Lab-uh thane!" I extend my sincere gratitude to our HOD, my mentor, class in-charge, and the placement team for their continuous support and encouragement. Throughout the years, various technical workshops, symposiums, Naan Mudhalvan sessions, and industrial visits played a key role in shaping our readiness for placements and inspiring us to think beyond textbooks. To all aspiring ECE engineers —there is immense potential in this field, so make the most of the opportunities, learn as much as you can, and enjoy the journey along the way.

Hi everyone,

I'm Rishikaran from the 2018–2022 batch, and yes — choosing ECE was entirely my call. My mindset back then? "Even if it's core, I'll manage... but if it leads to IT, that's a jackpot!" That decision led me through an adventurous journey of circuits, signals, and the unforgettable subject called modulation – which managed to modulate not just frequencies, but also my sleep, patience, and GPA. Our department felt like a mini tech lab, with blinking LEDs, tangled wires, and machines that looked like props from a sci-fi film. Notes flew around more than they stayed in our hands; industrial visits became photo sessions, and project reviews were nothing short of Cooku with Comali episodes — chaotic, comical, but somehow successful. Then came the Google Meet era — where 14 open tabs became our classroom, "Sir, mic is not working" was the official catchphrase, and viva sessions were handled half-awake, in half-formal dress code. Through it all, our ECE faculty stood strong like true resistors, always steady and supportive, rebooting our spirits when we lagged. They taught us not just engineering but also teamwork, resilience, and how to laugh through the pressure. Today, as an Advanced App Engineering Analyst at Accenture, I carry all those lessons with me – proof that an ECE student can handle hardware, software, and even life's unexpected exceptions with confidence and clarity.



N RISHIKARAN B.E.,

ADVANCED APPENGINEERING ANALYST – ACCENTURE , CHENNAI "The end of college is not a goodbye - it's the beginning of

giving back."



GANESH PRABHU M ,B.E., SOFTWARE ENGINEER-ZOHO

I am Ganesh Prabhy M from the 2021 to 2025 batch. I feel proud and grateful to be a part of the ECE family at VCET. I would like to sincerely thank all the faculty members of our department. They have been more than just educators—they have guided, motivated, and supported me in every situation. I truly value and miss those moments. The encouragement of my staff to pursue honours with a specialization in the RF Domain has been a constant source of strength throughout my journey. The knowledge I procured in my honours classes is truly irreplaceable. During my time here, I actively participated in and initiated several events. I can proudly say that my college experience has played a major role in shaping who I am today. I've had the privilege of serving as the ECE Association Secretary, a committee member, and a Class Representative. These responsibilities have helped me grow in confidence and prepared me well for professional challenges, especially placements. People often say things change, but the memories I carry from every classroom and lab in the ECE block will remain with

me forever. College has helped me grow both professionally and personally. Taking responsibility for events has been a rewarding experience. I'm also grateful for the friends I had by my side—cooperative, supportive, and always there to listen. Without teamwork, I am nothing. I also wish grand success to all the upcoming brothers and sisters. Thank you!

ECE STARTUPS

START-UP



DIVERSIFIEDSOLUTIONS

OBJECTIVES

To Promote Research and Development activities on Signal Processing. To Provide Services for clients need on capacity, channel estimation, Beam framing, synchronization, MIMO etc technologies.

MISSION

To render global service in signal processing driven by our passion for innovation.

VISION

To be leaders in customer satisfaction, employee empowerment, and to serve with dignity.

VELAMMAL COLLEGE OF ENGINEERING AND TECHNOLOGY





Mr.M.VIGNESHWARAN Mr.S.S.AATHITHYA Mr.A.SUBAN NILAVAN PRESIDENT & FOU

Mr.S.VASANTH

MANAGING DIRECTOR



Mr.M.G.PRASANNA

VENKATESH

CHIEF FINANCIAL OFFICER





XECUTIVE OFFICER

Mr.S.HARSHAN CHIEF RED OFFICER







TECHNOLOGIES



Velammal College of Engineering and Technology (Autonomous), Madurai



Mr.A.Suban Founder & Director



Mr.B.Surva



Mr.V.Veera Pandi Chief Executive Officer



Mr.K.Vishal Mr.D.Sathish Kumar Chief Technology Officer Board of Directors Board of Directors



Mr.P.Gopinath **Chief Operation Officer**





To be a strategic partner of global hi-tech product manufacturers for co-creating new generation technology products. Provide innovative and leading-edge technology solutions throughout the product lifecycle.

MISSION

VISION

To be a reliable Embedded Solutions Partner of leading Global Players in infotainment, networking and industrial automation domains

OBJECTIVE

To be a strategic partner of global hi-tech product manufacturers for co-creating new generation Technology product. To provide innovative and leading edge technology solutions throughout the product life cucle

START-UP

NEOFINITY SOLUTIONS

MEOFIMITY SOLUTIONS



Ms.S.Shivani Suvathek **Managing Director**

Mr.A.Al Mohamed Bilal **Director of Administration**

VISION AND MISSION

- To create unique and innovative Healthcare **Solutions in Neonatal Unit**
- To develop life saving devices in Neonatal care

OBJECTIVES

To design and develop wearable biomedical devices.

VELAMMAL COLLEGE OF ENGINEERING AND TECHNOLOGY (AUTONOMOUS), MADURAI



Mr.A.Vishal Jonathan Director of Operation



Dr.P.Karthikeyan Advisor-R&D

VCET Start-up

GREEN HEAL TECHNOLOGIES

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Mr.T.J.ARWIN PARASU PRESIDENT

Mr.A.THANASEELAN CHIEF EXECUTIVE OFFICER

Mr.L.VINOTH KUMAR ADVISOR(TECHNOLOGY DEVELOPMENT)





Mr.S.NITHIN NARAYANAN Mr.J.JAGAPRATHABAN DIRECTOR OF OPERATIONS DIRECTOR OF MARKETING

OBJECTIVES

VISION AND MISSION

To make a positive impact on society and the environment.

To continually innovate and build a strong brand that is wellrecognizable and well-regarded by customers. To attract and retain customers through excellent customer service and high-quality products and services.

- To develop projects based on Embedded systems to aid assistance to clients and provide solutions to the challenges faced by them.
- To ultimately become successful and have a sustainable business that provides values to its customers.

VELAMMAL COLLEGE OF ENGINEERING AND TECHNOLOGY (Autonomous), Madurai

VCET Start-up



VITALGENGE





VISION AND MISSION

"To empower individuals to take control of their health and improve their overall well-being through innovative and accurate health monitoring technology, education and personalized guidance."

OBJECTIVES

Mr.V.Karthick

Director





Ms.S.Ammu Nishitha Managing Director

Mr.S.Dinesh Executive Officer

- Develop and market cutting-edge health monitoring devices that are accurate, easy-to-use, and affordable.
- Invest in research and development to stay at the forefront of health monitoring technology.

VELAMMAL COLLEGE OF ENGINEERING AND TECHNOLOGY (AUTONOMOUS), MADURAI

CENTRE OF EXCELLENCE ON Innovative product development

CENTRE OF EXCELLENCE

Our college provides a dedicated space for innovation, equipped with cutting-edge tools like 3D printers, advanced fabrication setups, and PCB board design stations. It's a creative playground where imagination meets technology. Huided by our passionate mentors and eversupportive staff, we've not only learned how to operate theshigh-tech marvels but also how to turn our ideas into reality. It's been an inspiring journey of hands-on discovery and innovation!













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Literary Events Contest A showcaseof creativity and expressionthrough poetry, essays, andstorytelling, highlighting the literary talents of our students.

Circuit Debugging Contest A test of logic and technical skillswherestudents identified and fixed faults in electroniccircuits under time pressure.

Teacher's Day Celebration A heartfelttributetoour mentors, filled with appreciationfortheirguidance and dedication.



Mr. M. Vigneshwaran, UX/UI Designer at Maghil Hub, shared insights on design thinking, user experience, and career

ECE LABORATORIES



















வெளியிலிருந்து வந்த கிளியை வீட்டுக்குள் வளர்க்கத் தொடங்கினோம் அது எங்கள் மொழியைப் பேசுவது இனிமையாக இருந்தாலும் வருத்தம்தான் தாய்மொழியை மறந்தது

- ஸ்ரீ கிருஷ்ணா அப்துல் கலாம்



ht tic th

ரௌத்திரம் பழகு!!

Alth

உணர்ச்சியின் தலைவன், சங்கத்தின் வெளிச்சம், கோபத்தின் சிறப்பு, பெண்களின் ஆயுதம்,

நீ ரௌத்திரம் பழகு!

மனசாட்சியின் நெகிழ்ச்சிக்காக, சபையின் உத்வேகமாக, கோழை இனத்திற்கு உதாரணமாக, நேர்மையின் வடிவமாக,

நீ ரௌத்திரம் பழகு!

ஜாதி, மதம் புகழ்பவர்களுக்கு எதிரே.. லஞ்சப்பிரியர்களுக்கு எதிரே.. ஆண், பெண் என பிரித்து பார்ப்பவர்களுக்கு எதிரே.., நீ ரௌத்திரம் பழகு!

இயற்கையின் அருமை வெளிப்படுத்த, அதை கட்டிக்காக்க போராடும் உழவர்களுக்காக,

நீ ரௌத்திரம் பழகு!

இப்படிக்கு, பா. சுவேதா.

n p me ond night ating or all big-big-ne ye ne ye ne ye ne ye ckth netl



கண் பார்த்தால் மனம் களிக்கும், குரல் கேட்டால் நெஞ்சம் சிலிர்க்கும்,

நாள் தோறும் நினைவு வருது, மனம் மெதுவாக உன்னை தேடுது,

ஒரு முறை முகம் பார்த்தாலே, ஓர் உயிர் முழுதும் உனக்கே.

> லோகநாத் ச III ECE B

Wires and Dreams: The Circuit of Tomorrow

In silent rooms where circuits breathe, We weave our thoughts beneath the sheath. With every chip and glowing light, We map out stars beyond our sight. Through tangled wires and flashing codes, We carve new paths, unknown roads.



Logic gates open like minds set free, Unlocking tomorrow's mystery. A resistor holds our moments tight, Capacitors pulse with silent might. Our dreams are drawn in copper lines, Across the boards, our vision shines. Not just machines we dare to mold, But futures brave and stories bold. We aren't just students, lost in streams— We are the power behind the dreams.

> M.SOWMIYA III ECE A

"Scar of the Moon"

Like the moon that glows yet cracks inside, Fading quiet, with no place to hide. Not shattered, not in need of mend, Just a scar the night itself will tend.



கைகளை கொண்டு தொடங்<mark>கிய நீ</mark> எழுத்தில் மலர்ந்தாய்,

-TINA

உண<mark>ர்வுக</mark>ளை எழுத்தூக்கிய நீ உள வெளிப்பாடுகளை அறிந்து கொண்டாய்,

உன்னிடம் உள்ள மையோ என்னை வெளிப்படுத்துகின்ற ஆற்றல் அது என்னை அறியும் ஓர் காந்து, எழுதுகின்றேன் மையின் இறுதி வரை

- சு.சாதனா

NATURE'S EMBRACE

IN THE HEART OF THE WILD, I FOUND MY PLACE, THE SKY, THE EARTH, AND ALL THEIR GRACE. NEW BEGINNINGS RISE WITH EVERY DAWN, IN NATURE'S REALM, WE CARRY ON.

FROM THE WHISPERS OF THE WIND, WE LEARN, AND THROUGH EACH SEASON, WE DISCERN. IN EVERY BREEZE AND SONG OF RAIN, THE WORLD UNFOLDS ITS SWEET REFRAIN.

AMONG THE THORNS AND TANGLED VINES, STRENGTH AND V FOREVER INTERTWINE. THROUGH EVERY CHALLENGE, WE STAND TALL, EMBRACING LIFE THROUGH RISE AND FALL.

IN THE NATURE'S EMBRACE, WE FIND OUR WAY, A JOURNEY MARKED BY NIGHT AND DAY. FROM THE ROOTS BENEATH TO STARS ABOVE, WE'RE LEAPED TOGETHER INTO ENDLESS V.

RISHI KUMAR K M III ECE A

Binary Heartbeat

In midnight's hush, I sit alone, Among the wires I've called my own. They hum in tones so soft, so near– A language only I can hear.

From copper threads, the pulses stream, Like broken thoughts inside a dream. Each surge, each spark, a fleeting sigh, That fades before I ask it why.

The gates respond in silent grace, Like shadows shifting into place. Each waveform bends, each current glides, Across the space where self resides.

When silence crowds the outer air, These signals say they know, they care. No need for masks, or spoken sound— In bits and volts, I'm always found.

Capacitors hold back my pain, Resistors bear the quiet strain. Inductors loop where doubts reside,

And logic flows 7 cannot hide.

Upon this board of soldered scars, I sketch my hopes among the stars. For I am not of blood and bone– But code and current, heart and beat.

> Aashita S III ECE A

> > 7111

Photography



SRIVASTHAN S III ECE B



MONIKA B III ECE B



KIRANKUMAR P III ECE B



NITHYA M III ECE B



LOGANAATH S III ECE B



SAMIKSHA S III ECE B





SUVEDHA B III ECE B

SWETHA S III ECE B

Photography 🔊



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KAVIYA R III ECE B





ARUN T R III ECE B YOGESH K III ECE B





DANUSH KUMAR B III ECE B SUDHARSAN M III ECE B





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Dharshini .J III ECE A

Harini .V III ECE A



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B.DHIVYA DHARSHINI III ECE B R.KAVYA III ECE B S.SAMIKSHA III ECE B

Artisan's Corner



Deva Dharshini S III ECE B



Seema Farahana . M III ECE A



Kaviya .R **III ECE B**



Rajapandi . L III ECE A



Monika B **III ECE B**



Josaline Oviya . I III ECE A



Deepthika . A III ECE A



Harini . V III ECE A









jegajeevan G II ECE B



I'W(

lac

all

DS1C

Rathivarshaa M II ECE C



Muthuganesh .M II ECE B



Shruthi K.A II ECE A



Sahitya G.M II ECE A



Nilofar Barveen M II ECE-C





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"Crafting moments ,one frame at a time"

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