

Centre Line Communication

A Half-Yearly NewsLetter Published by the Department of Electronics and Communications, Department of Electronics & Communication Engineering

June 2025

Issue-19





Vision

“To become leading centre of learning that incorporates the academic excellence and latest trends in research to make a significant contribution to the society in the field of Electronics and Communication Engineering.”

Mission

- To educate and empower the women students with state of art knowledge and latest trends in electronics and communication engineering to meet the growing real-world challenges..
- To provide training to the students that bridges the gap between industry and academia.
- To inculcate professional ethics and morals among the students.
- To inspire the students to use technology for societal issues.
- To nurture engineers with a focus on sustainable development, advanced technical skills, and entrepreneurial innovation.

PEOs

- PEO 1: Graduates will have the ability to apply the principles of Electronics and Communication Engineering that provides solutions for real world problems.
 - PEO 2: Graduates will be capable of contributing to the advancement of sustainable development and innovation.
 - PEO 3: Graduates will have professional ethics and morals to formulate and solve engineering problems that serve the society.
 - PEO 4: Graduates will have the zeal and motivation to get involved in life long learning process to become innovators and dynamic leaders.
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STUDENT ACHIEVEMENTS



T. Teja Rama Lakshmi (22Bo1A0404) of III ECE received Outstanding Academic Performance award in IET Scholars & Strategies Summit (S3) 2025 & Achievements Awards 2025 at The Chancery Hotel, Bangalore held on 08-03-2025. Presented by the IET Bangalore Network & IET Hyderabad Local Network.

PLACEMENTS SAGA



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Center

Dr.K.Padmavasavi Head of ECE Department published a paper titled “Spectral efficiency enhancement and energy optimization in 5G networks via stochastic optimization-inspired by modified slime mould algorithm” *Int. j. inf. tecnol.* 17, 883–894 (2025).



Dr.G.Challa Ram, Dr.M Venkata Subbarao of ECE Department published a paper titled “FPGA IMPLEMENTATION OF HYBRID ADDER”, *Proceedings on Engineering Sciences*, 10.24874/PES07.01B.006



Dr.D.Ramesh Varma, Dr.M Venkata Subbarao of ECE Department published a paper titled “DESIGN OF A 2.45 GHZ COMPACT WEARABLE ANTENNA FOR WIRELESS BODY AREA NETWORKS AND INDUSTRIAL WIRELESS APPLICATIONS”, *Proceedings on Engineering Sciences*, 10.24874/PES07.01B.009



Dr.G. Challa Ram, Dr.M. Venkata Subbarao of ECE Department published a paper titled “A dual functional SSPP based microwave sensor for detecting volumetric concentration of alcohol mixtures and paper thickness”, *AEU - International Journal of Electronics and Communications*, Volume 196, June 2025, 155796 .



Dr.M V Ganeswara Rao of ECE Department published a paper titled “Design and Electrical Performance Analysis of AlGaAs/InGaAs/InP Pseudomorphic HEMT”, *Engineering Letters* Volume 33, Issue 4, April 2025, Pages 1029-1034

Dr. M Pradeep Kumar of ECE Department published a Book Chapter titled “SMART HOSPITAL IN SMART CITIES” *Digital Twin and Blockchain for Smart Cities* during January 2025.





Dr. M Pradeep Kumar of ECE Department Presented a paper titled “THREE FEATURE ANALYSIS OF DETECTION AND IDENTIFICATION OF FRUITS USING K-NEAREST NEIGHBOR ALGORITHM” in the AIP Conference Proceedings January 2025.

Dr. G. Challa Ram of ECE Department presented a paper titled “LIVER TUMOUR DETECTION IN COMPUTED TOMOGRAPHY IMAGES THROUGH IMAGE PROCESSING AND DEEP LEARNING” in the Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, LNICST during 2025.



Dr. Rathikanta Sahoo of ECE department published a paper titled “Artifact removal of EEG data using wavelet total variation denoising and independent component analysis” Analog Integr Circ Sig Process 122, 14 (2025).

Dr. G. Challa Ram of ECE department published a paper titled “Tunable dual-band metasurface absorber utilizing electric dipole and magnetic loop in a DC-connected bilayer graphene stack: A theoretical approach,” Diamond Relat. Mater., vol. 154, 2025, Art. no. 112208.



Mr. D. Girish Kumar., G., Dr. Subbarao, M. V., Dr. G. Challa ram, Dr. D. Ramesh Varma, & Mr. E. Praveen Kumar of ECE department presented a paper titled” A Compact CNN Architecture for Detection and Classification of Cotton Leaf Diseases.” In 2024 International Conference on Integrated Intelligence and Communication Systems (ICIICS).

Dr.G. Challa Ram of ECE department published a paper titled “Tunable triband graphene metasurface absorber with wide frequency agility for 6G and beyond communication in THz gap regime,” Opt. Laser Technol., vol. 187, 2025, Art. no. 112793.



Dr.G. Challa Ram, Dr.M. V. Subbarao of ECE department published a paper titled “Tunable graphene-based terahertz sensor for biochemical sensing with ML-driven refractive index prediction,” Phys. Scr., vol. 100, no. 2, pp. 025531, Jan. 2025.

TECHNOVA 2K25

TechNova 2025 is a national-level technical symposium exclusively for women, organized by Shri Vishnu Engineering College for Women (Autonomous) on March 7th and 8th, 2025. This dynamic event aims to inspire and empower aspiring women engineers by providing a platform to showcase their technical skills, innovation, and creativity.



LEARNING EXPERIENCES



Department of Electronics and Communication Engineering organized the "CIRCUIT SAGA" event on March 7, 2025, to promote circuit design skills. The event was coordinated by Dr. R. Sahoo and Mr. Hari Krishna Kharidu, with Dr. K. Sai from SRKR College serving as the judge. Eleven teams, including three from outside colleges, participated in the competition.

Department of ECE hosted the "Women Innovate for a Sustainable Future-Make-a-Thon 2025" on March 8, 2025, in collaboration with Vishva Technology Business Incubator. The 24-hour innovation challenge focused on Electronics and Communication Engineering (ECE) solutions aligned with Sustainable Development Goals (SDGs). Ten all-women teams (46 participants) worked on projects in IoT, HealthTech, embedded systems, and smart infrastructure.



Department of ECE Organized an Exciting 'Treasure Hunt'. A total of 140 students, grouped into 20 teams, actively participated in the event, solving challenging clues and demonstrating their technical knowledge and problem-solving skills.

CIRCUITVERSE HACKATHON

Department of ECE hosted the CIRCUITVERSE HACKATHON 2025 on 16th and 17th February 2025 in collaboration with the Institution's Innovation Council. The event engaged 44 students in a 24-hour innovation challenge focused on design thinking, rapid prototyping, and interdisciplinary teamwork. The hackathon featured thematic tracks such as AI for smart cities, assistive technologies, and next-gen mobility solutions.



IDEA LAB

The IDEA Lab of Shri Vishnu Engineering College for Women (SVECW), Bhimavaram, had the prestigious opportunity to showcase its groundbreaking innovations at the AICTE IDEA Lab Tech Fest 2025, held at AICTE Headquarters, New Delhi on March 7, 2025

SVECW students presented five innovative projects:

- 3D Printed Synchrono-Mesh Gearbox
- 3D Printed 4-Stroke 4-Cylinder Engine
- Saline Alert System
- Automatic Seed Sowing Robot
- Footstep Power Generator – Harnessing Human Motion for Sustainability

Prof. T.G. Sitaram, Chairman of AICTE, commended the students' innovative contributions. The projects were presented by Jhansi (III ECE) and Shanti (III EEE), under the mentorship of Dr. T. Sudheer Kumar, Professor, Department of ECE, and Mr. Satya Krishna, Assistant Professor, Mechanical Department.



EXPERT TALK

Department of ECE in collaboration with the Institution's Innovation Council organized an Expert Talk on "Fusion Innovation on Power Electronics" on 27th February 2025. The session, led by Mr. Basil Issac, Vice President & Director of ERAM Power Electronics Pvt. Ltd.

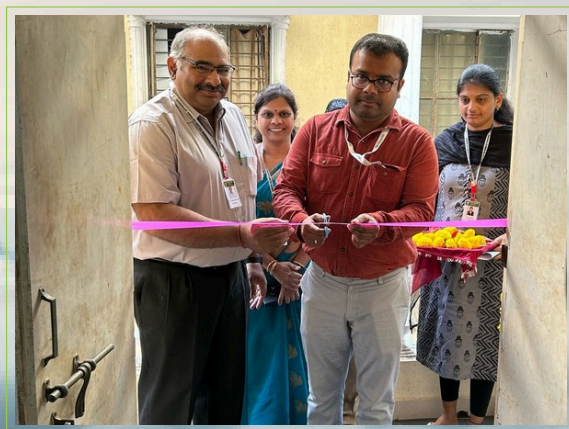


EXPERT TALK

Department of Electronics and Communication Engineering in collaboration with the Institution's Innovation Council (IIC), successfully conducted an Expert Talk on "Innovating Space Technologies – Opportunities for Startups in HAB Experiments" on 30th January 2025. The session was led by Mr. Faraz, Design Engineer at Kalam Labs, Lucknow



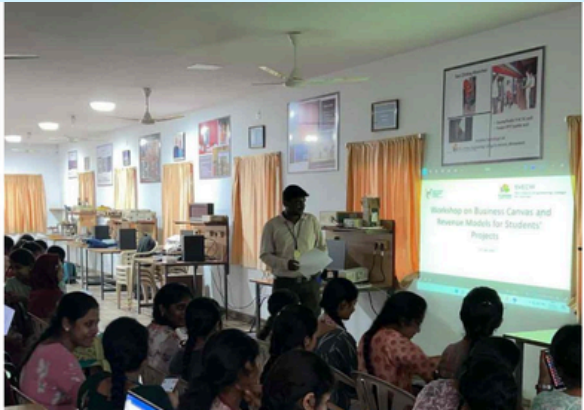
Microchip Embedded Systems Developer



The Department of Electronics and Communication Engineering at Shri Vishnu Engineering College for Women inaugurated the Microchip Centre of Excellence, focusing on innovation in embedded systems and IoT. A One-Week Faculty Development Program on Microchip Embedded Systems Developer, organized by EDUSKILLS, took place from April 28 to May 3, 2025. Led by Sri Prabhupada Samal, the program offered hands-on learning in embedded systems using Microchip PIC microcontrollers, covering MPLAB X IDE, embedded C programming, peripheral interfacing, RTOS, and debugging techniques.

WORKSHOP

Department of Electronics and Communication Engineering organized a two-day workshop on "Business Canvas & Revenue Models" for student projects on Assistive Technology on 16th-17th December 2024. The workshop, conducted in collaboration with the Institution's Innovation Council (IIC), aimed to equip 45 students with entrepreneurial skills, business model development, and revenue strategies for their innovative projects.



Idea Pitching - Dream. Design. Deliver. - Pitching for the SDGs

Dr. G. Challaram and Dr. D. Ramesh Varma of ECE Department organized an event on April 9, 2025, titled "Idea Pitching – Dream. Design. Deliver. – Pitching for the SDGs" as part of Mahila Prajwalan – An Innovation Drive. It aimed to educate first-year engineering students on idea pitching fundamentals, sustainable development goals (SDGs), and the NABC framework (Need, Approach, Benefit, Competition). Mr. K. Ashwin, Technology Business Incubator Manager at Vishwa TBI, led the session, engaging around 800 students in discussions and mini pitching activities. The event successfully raised awareness about effectively structuring and presenting innovative ideas in relation to global sustainability challenges.



Institution's Innovation Council (IIC)

Faculty Development Program

Institution's Innovation Council (IIC) conducted a Faculty Development Program (FDP) on "Innovate, Build, Scale: A Faculty Development Program on Entrepreneurial Mindset and Startup Frameworks" from February 3, 2025, to February 7, 2025.



Student Certification Course

Institution's Innovation Council (IIC) conducted a Student Certification Course on "Innovation & Startup Excellence: A Certification Course on IIC, Design Thinking, and Entrepreneurship" for Student Innovation Ambassadors from February 11, 2025, to February 15, 2025.

Project Expo

ISTE Student Chapter in association with Institution's Innovation Council (IIC) conducted INNOVATE X - 2025: Institutional Innovation Challenge & Expo during 21st & 22nd February 2025



NATIONAL SCIENCE DAY



National science day 2025 was celebrated on 28th February at Shri Vishnu Engineering College for Women near Chess Board at open Air auditorium. The event was hosted by ISTE STUDENT CHAPTER in Association with Institution's Innovation Council (IIC). Organized various Technical Events under the Esteemed Guidance of Faculty Advisor, Dr.G.R.L.V.N. Srinivasa Raju, Professor, Dean R&D of SVECW. A huge number of students from various colleges around SVES Campus have actively participated in 10 Technical events conducted. Winners are awarded with Prizes.



Learning TODAY Leading TOMORROW

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