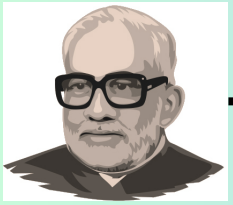
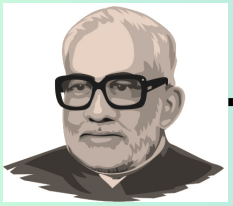


ILLUMINARIES

A.Y 2024-2025 ISSUE 2 JUNE- 2025

VISHNU UNIVERSAL LEARNING
SVECW ESTD : 2001
Shri Vishnu Engineering College for Women
(Autonomous)
Vishnupur, Bhimavaram, Andhra Pradesh

TABLE OF CONTENTS



ILLUMINARIES

A.Y 2024-25 ISSUE - 2 JUNE - 2025

Vision:

"To establish a knowledge hub in the field of Electrical & Electronics Engineering to meet the needs of the society"

Mission:

- To produce quality Electrical and Electronics Engineers.
- To inculcate discipline and ethical values among the students.
- To empower students to succeed in higher education and research.

Editor's MESSAGE:

With great pleasure, I inform that the newsletter for the second half of 2024 from the Department of Electrical and Electronics Engineering has been released. It features a variety of accomplishments and activities from our staff and students. The goal of Shri Vishnu Engineering College for Women (Autonomous) is to illuminate students' lives by using their understanding of flame to create shapes in a distinctive way.

Student Article

Title : Design and Implementation of Solar-Powered Grass Cutter: (A Prototype)

ABSTRACT : Since ancient times, Sunlight has been the main source of heat energy. Alternative energy sources, commonly termed non-conventional or renewable energy sources, are naturally available like Solar, Wind, and Hydro. It is used as an alternative source of energy in place of fossil fuels which causes pollution. This paper describes how we designed and built a solar-powered grass cutter. By incorporating solar panels, the machine harnesses sunlight as its main energy source. The main objective of developing the Prototype model of the grass cutter is to create an eco-friendly solution for lawn maintenance that reduces greenhouse emissions and minimizes the usage of fossil fuels. This prototype is designed so that it is controlled remotely by using Arduino UNO. After developing the prototype model, the system analysis is accomplished, and based on the results, the solar grass cutter's reliability with the system's high efficiency is compared with previous studies. This project aims to showcase solar-powered technology in practical applications to inspire the adoption of non-conventional energy sources in everyday tasks.

Authors

1) Kunapareddy Navya Harshitha
2) Pulagam Usha Devi
3) Pappoppu Pushpa Rekha
4) Patan Sabiha Roshin

STUDENTS CORNER

AICTE IDEA LAB TECHFEST- 2025

cutting-edge innovations are Presented by Shanthi Priya - 21B01A0249 of III-EEE Student have participated in AICTE IDEA LAB Tech Fest 2025 Program, conducted by AICTE, New Delhi on 07.03.2025 .

Internships

IFB

KONE

Allumini Meet

Allumini meet was held at VEDIC Bengaluru under the Presence of our Honorable belowed Chairman K.V.V.Vishnu Raju garu along with our Department Placement coordinator Mr.K.P.Swaroop on 15th Febraury 2025. Some of the EEE Alimini from various companies like Hitachi Energy, siemens etc. are iteracted with our Chairman sir.

GATE

Three students from EEE are selected are qualified and ranked in GATE -2025 for the year 2024-2025.

21B01A0207
D. Srihitha
Rank : 7,981

20B01A0287
P. MARRY AMULYA
Rank : 17, 213

21B01A0242
P.L.D.Bhavani
Rank : 17,748

20B01A0212
B. Sri lohitha
Rank : 20,760

Innovatex-2025

Innovatex -2025 conducted on 21st & 22nd February 2025 : Got 1st Prize in Innovatex with cash prize 3000 rs. Title - " Automatic Control and Weight Monitoring of a Vacuum Based Grain Collecting Machine" Under the esteemed Guidance of Mr.M.S.R.Ganesh, Assistant Professor , EEE-Dept. 1)K. Harika Devi - 21B01A0223 - IV-EEE 2)V. Sri Pujitha - 21B01A0259 - III-EEE 3)G. Sailaja - 21B01A0223 - III-EEE 4) B. Chandini - 21B01A0213 – III-EEE

Project Acheivements

Ms. Sri Pujitha Veligatla (22B01A0259), Ms. Guddati Sailaja (22B01A0223), Ms. Budithi Chandini (22B01A0213), Ms. Maddala Monanjali (22B01A0233) of III EEE got shortlisted for participation in a Grand Finale of IEEE YESIST12 (YOUTH ENDEAVORS FOR SOCIAL INNOVATION USING SUSTAINABLE TECHNOLOGY) being organised by IEEE UKM student Branch, MALAYSIA during August 23rd-24th, 2025. The project selected for competition is "Solar Charging Station for EV's" under the mentorship of Mr. M Siva Rama Ganesh, EEE Department.

Ms. A Sri Ramya (21B01A0201), Ms. M Purna Sri (22B05A0203), Ms. K Harika Devi (21B01A0223), T. Veda Sushma Sri (21B01A0255) of IV EEE got shortlisted for participation in a Grand Finale of IEEE YESIST12 (YOUTH ENDEAVORS FOR SOCIAL INNOVATION USING SUSTAINABLE TECHNOLOGY) being organised by IEEE UKM student Branch, MALAYSIA during August 23rd -24th 2025. The project selected for competition is "Automatic control and weight monitoring of a vacuum based grain collecting machine" under the mentorship of Mr. M Siva Rama Ganesh, EEE Department.

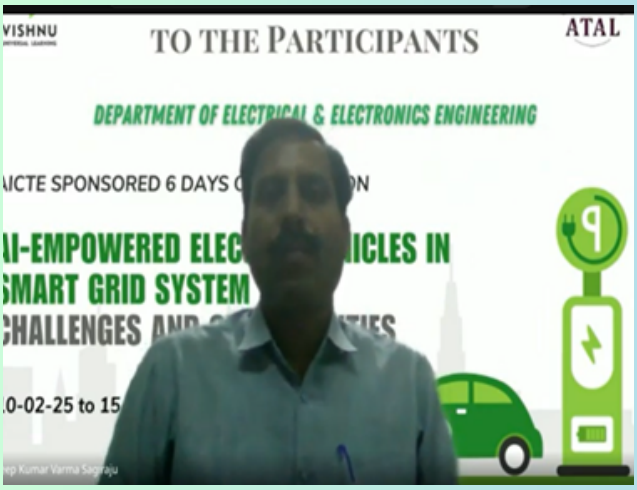
Ch. Nandini Priya (2B05A0202), NSNSR Pavani (22B05A0204), P. Dharani Satya(21B01A0241) and G.Harshitha (21B01A0214) of IV EEE have been awarded the *Best Paper Award* for the paper titled "SMALL SIGNAL MODELLING AND ANALYSIS OF A MODIFIED SWITCHED-INDUCTOR CONVERTER USING VOLTAGE MULTIPLIER CELL" at 2nd International Conference on Smart and Sustainable Energy Systems (ICSSES 2025) Organized by the Department of EEE, Vishnu Institute of Technology (A), Bhimavaram during 14-15 March 2025. Guided by Mr. D.Lakshman Kumar, EEE department.

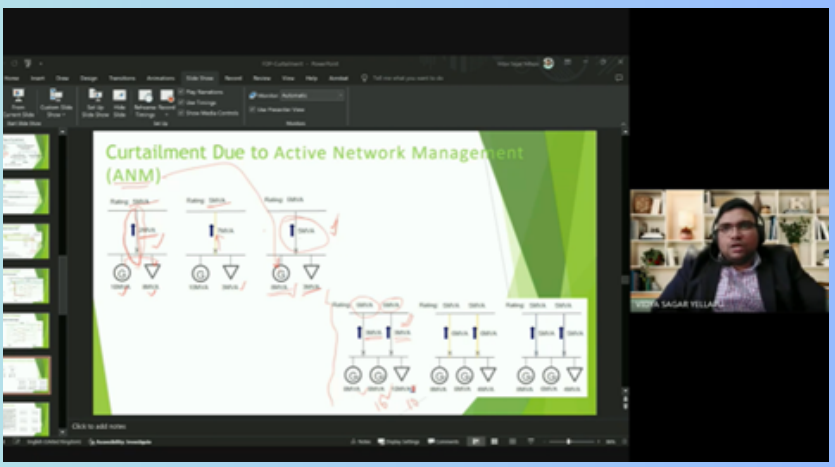
R &D SHOWCASE

R & D Show case with Project Expo -2025 in association ISTE STUDENT CHAPTER & IIC conducted on 18th March -2025 Title - "Automatic Control and Weight Monitoring of a Vacuum Based Grain Collecting Machine" Under the esteemed Guidance of Mr.M.S.R.Ganesh. achieved 3rd Prize 1)A.Sri Ramya-IV 21B01A0201 2)K. Harika Devi - 21B01A0223 - IV 3)M Purna Sri 22B01A0203-IV 4)T Veda Sushma Sri 21B01A0255-IV 5)P.Divya Sri 21B01A0237.

AICTE Training and Learning (ATAL) Academy
One week FDP

The AICTE ATAL-sponsored six-day online Faculty Development Program (FDP) on "AI Empowered Electric Vehicles in Smart Grid Systems: Challenges and Opportunities" was organized by the Department of Electrical Engineering at Shri Vishnu Engineering College for Women (SVECW). The program commenced with an inaugural ceremony attended by a distinguished gathering, including faculty members, students, and participants from various institutions. DileepKumar Varma, Professor in the EEE Department and FDP Coordinator, delivered a warm welcome address. Following this, Dr. M. V. Srikanth, Assistant Professor and Co-Coordinator, provided an overview of the FDP, outlining its objectives and key topics.





PLACEMENTS

Mahindra

MRF

Kuruva Usha sree
21B01A0224
3 LPA

Suvvari Janaki
21B01A0253
3 LPA

Vasa Chandini
21B01A0259
3 LPA

FACULTY ACHIEVEMENTS

Dr. J. Rohith Balaji of EEE Department has received a sanction for a DST-funded project under the SEED/TIDE scheme, titled "Dictated Note Printer in Braille for the Blind Using Cyber-Physical Systems," with an approved grant of ₹34,24,523.

Dr. Sagiraji Dileep Kumar Varma, Omkar Koduri of EEE Department published a paper titled "Enhancing Dynamic Performance of Grid Tied Wind Turbine using ADRC based STATCOM," 2024 International BIT Conference (BITCON), Dhanbad, India, 2024, pp. 1-6, doi: 10.1109/BITCON63716.2024.10985027

Mr.K. P, Swaroop, M. V. Srikanth of EEE Department published a paper titled "Selective Harmonic Elimination in Multilevel Inverters with Fully Informed Search Algorithm," 2025 3rd International Conference on Smart Systems for applications in Electrical Sciences (ICSSES), Tumakuru, India, 2025, pp. 1-4, doi: 10.1109/ICSSES64899.2025.11009831.

Program Educational Objectives :: B. Tech. - EEE

PEO 1 : Demonstrate employability skills and leadership qualities to serve the society.

PEO 2: Achieve personal and professional success with awareness and commitment to their ethical and social responsibilities.

PEO 3: Improve professional competence through life-long learning including higher education and research.

Program Outcomes:: B. Tech. - EEE

PO1: Engineering Knowledge: Apply knowledge of mathematics, natural science, computing, engineering fundamentals and an engineering specialization as specified in WK1 to WK4 respectively to develop to the solution of complex engineering problems.

PO2: Problem Analysis: Identify, formulate, review research literature and analyze complex engineering problems reaching substantiated conclusions with consideration for sustainable development. (WK1 to WK4).

PO3: Design/Development of Solutions: Design creative solutions for complex engineering problems and design/develop systems/components/processes to meet identified needs with consideration for the public health and safety, whole-life cost, net zero carbon, culture, society and environment as required. (WK5).

PO4: Conduct Investigations of Complex Problems: Conduct investigations of complex engineering problems using research-based knowledge including design of experiments, modelling, analysis& interpretation of data to provide valid conclusions. (WK8).

PO5: Engineering Tool Usage: Create, select and apply appropriate techniques, resources and modern engineering & IT tools, including prediction and modelling recognizing their limitations to solve complex engineering problems. (WK2 and WK6).

PO6: The Engineer and The World: Analyze and evaluate societal and environmental aspects while solving complex engineering problems for its impact on sustainability with reference to economy, health, safety, legal framework, culture and environment. (WK1, WK5, and WK7).

PO7: Ethics: Apply ethical principles and commit to professional ethics, human values, diversity and inclusion; adhere to national & international laws. (WK9).

PO8: Individual and Collaborative Team work: Function effectively as an individual, and as a member or leader in diverse/multi-disciplinary teams.

PO9: Communication: Communicate effectively and inclusively within the engineering community and society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations considering cultural, language, and learning differences.

PO10: Project Management and Finance: Apply knowledge and understanding of engineering management principles and economic decision-making and apply these to one's own work, as a member and leader in a team, and to manage projects and in multidisciplinary environments.

PO11: Life-Long Learning: Recognize the need for, and have the preparation and ability for i) independent and life-long learning ii) adaptability to new and emerging technologies and iii) critical thinking in the broadest context of technological change. (WK8).

Program Specific Outcomes :: B. Tech. - EEE

PSO 1: Ability to enhance living standards of disabled people by designing appropriate products with the help of technology.

PSO 2: Competence to explore, analyze and solve problems related to power electronic systems.