NEWSLETTER

01-07-2022 to 31-12-2022

EEE Department

Peace be amplified, World be rectified

OUR SOURCE OF INSPIRATION

DR. RAVURI VENKATASWAMY CHAIRMAN

RAVURI BALAJI VICE CHAIRMAN

DR. T.SUNILKUMAR REDDY PRINCIPAL

ABOUT COLLEGE

Sri Venkatesa Perumal College of Engineering (SVPP), established in 2001 in Puttur, Tirupati, Andhra Pradesh, is promoted by the Tamilian Education Academy. Spread over 25 acres, SVPP features well-ventilated classrooms, state-of-the-art labs, and extensive sports facilities. It is affiliated with Jawaharlal Nehru Technological University Anantapur (JNTUA), ISO 9001-2000 certified, approved by AICTE, and accredited by NAAC with an 'A' grade. The CSE, ECE, and EEE departments are accredited by NBA. SVPP offers 5 undergraduate courses (540 seats) and 7 postgraduate engineering courses (18 seats each), along with MBA (120 seats) and MCA (60 seats). The campus has WiFi, a central library with digital resources, and a fleet of 20 buses for transportation. Seventy percent of the faculty are ratified by JNTUA, ensuring distinguished and experienced educators.

SVPP provides industry-standard labs and workshops, and research centers equipped with the latest software. Strong industry links through MOUs with companies like Infosys, Cyient, Wipro, Zenopsys, and ERDL enhance students' learning and employment prospects. The college's focus on employment includes active support for internships. Strategically located on the Chennai-Bangalore Highway, SVPP is 20 minutes from Tirupati Airport, offering a lush, green, and pollution-free campus environment.

VISION OF THE INSTITUTE

To emerge as a Center of Excellence for Learning and Research in the domains of Engineering,Technology, Computing and Management.

MISSION OF THE INSTITUTE

M1: To provide congenial academic ambience with state-of-art resources for learning and research.

M2: Ignite the students to acquire self-reliance in the latest technologies.

M3: Unleash and encourage the innate potential and creativity of students.

M4: Inculcate confidence to face and experience new challenges.

M5: Foster enterprising spirit among students work collaboratively with technical Institutes/ Universities/Industries of National and International repute.

VISION OF THE DEPARTMENT

The vision of Electrical & Electronics Engineering Department is dedicated for curving the youth as dynamic, competent, valued and knowledgeable professionals who shall lead the nation to a better.

MISSION OF THE DEPARTMENT

- Providing quality education, student centered teaching – learning process and state of art infrastructure for professional aspirants hailing from both rural and urban areas.
- Imparting technical education that encourages independent thinking, develops strong domain of knowledge, hones contemporary skills and positive attitudes towards holistic growth of young minds.
- Evolving the department into a centre of academic and research excellence.

MEET OUR ESTEEMED FACULTY

We are proud to introduce our distinguished faculty members, whose expertise and dedication drive our institution's excellence.

Professors

Dr. G. Sreenivasan
Dr. G. Sabarinath
Dr. G. Sheshadri

Associate Professors

Mr. K. Siva Kumar
Mr. K.Venkatapathi
Mr. S. Shanmugam
Mr. K. Kiran
Mr. M. Lokanadham

Assistant Professors

Mr. J. Nagaraju
Mrs. N. Sushmitha
Mr. M. Harish
Mr. A. Rajesh
Mr. G.Vijay Kumar
Mr. D. Mohan
Mr. K. Janardhan
Mr. P. Dhanasekharan
Mr. K. Rajesh
Mr. S. Munisekhar
Mr. A. Naveen Kumar
Ms. P. Geetha
Mr. T. Pavan Kumar

Each of these individuals brings a wealth of knowledge and a passion for teaching, ensuring that our students receive the best education and mentorship. We are honored to have such a dedicated and talented team.

Faculty Development Programs (FDP) Attended

Each of these individuals brings a wealth of knowledge and a passion for teaching, ensuring that our students receive the best education and mentorship. We are honored to have such a dedicated and talented team.

Hybrid Electric Vehicle's Battery Management System – Research Challenges & Opportunities

November 25-29, 2022

Focused on managing hybrid electric vehicle batteries, addressing efficiency and sustainability, attended by:

- Dr. K. Siva Kumar
- Dr. G. Srinivasan
- Dr. G. Sabarinath
- Dr. G. Sheshadri
- Mr. M. Lokanadham

Frontier Research in Electrical Engineering

September 18-22, 2022

Covered cutting-edge research in electrical engineering, fostering innovations in power systems and electronics, attended by:

- Dr. K. Siva Kumar
- Dr. G. Sabarinath
- Dr. G. Sheshadri
- Mr. S. Shanmugam
- Mr. M. Lokanadham
- Mr. K. Janardhan
- Mr. S. Munisekhar
- Mr. D. Mohan
- Ms. P. Geetha
- Mr. M. Harish

Emerging Technologies in Generation, Operation and Control in Electrical Systems

June 6-11, 2022

Explored emerging technologies in electrical systems, attended by:

- Dr. G. Sabarinath
- Dr. G. Sheshadri
- Mr. K. Janardhan
- Mr. S. Munisekhar
- Mr. D. Mohan
- Mr. K. Venkatapathi
- Mr. G. Vijay Kumar
- Ms. P. Geetha

Applications of Graph Theory and Artificial Intelligence in Distributor Feeder Management

November 28-December 2, 2022

Applied graph theory and AI to distributor feeder management, attended by:

- Mr. K. Venkatapathi
- Mr. G. Vijay Kumar
- Mr. T. Pavan Kumar
- Mr. A. Rajesh
- Mr. M. Harish

Fuel Powered Hybrid Electric & Modern Vehicles

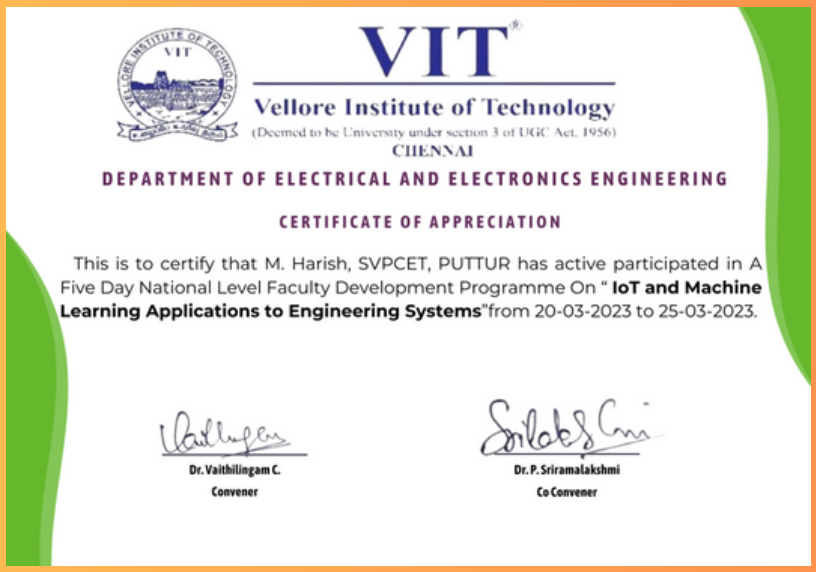
July 19-24, 2022

Explored advancements in hybrid electric and modern vehicles, attended by:

- Ms. P. Geetha

These explanations provide a concise overview of each FDP topic, highlighting their significance and the faculty members who attended each program.

Some of the Certificates are attached here for reference:



Successful Completion of Wireless Power Transfer for Vehicles Project (Funding Project)

PROJECT OVERVIEW

The project titled "Hardware Modelling of Wireless Power Transfer for Vehicles," led by **Prof. K. Siva Kumar**, was successfully completed during the 2022-23 academic year. This research aimed at developing efficient wireless charging solutions for electric vehicles.

FUNDING AND SUPPORT

Funded by Hi-Q TEST EQUIPMENT Pvt. Ltd with a grant of ₹35,000, the project ran from 14/09/2022 to 16/03/2023. This financial support was crucial in advancing the research and development of wireless power transfer technologies.

IMPACT AND FUTURE PROSPECTS

The project's outcomes are expected to significantly impact the electric vehicle industry by providing more efficient and convenient charging solutions. Future developments based on this research could lead to broader adoption of wireless charging infrastructure, promoting the use of electric vehicles.

Successful Completion of Power Quality Assessment Project (Funding Project)

PROJECT OVERVIEW

"Assessing Power Quality in Electrical Systems," led by K. Kiran, was successfully completed during the 2022-23 academic year. The project aimed at evaluating and improving the quality of electrical power systems.

FUNDING AND SUPPORT

Supported by VIJAI ELECTRONICS LTD with a grant of ₹38,000, the project was conducted from 28/09/2022 to 30/03/2023. This funding was pivotal in facilitating the research efforts.

IMPACT AND FUTURE PROSPECTS

The findings from this project provide valuable insights into maintaining and enhancing power quality in electrical systems. Improved power quality is essential for the reliability and efficiency of electrical grids, and this research contributes to achieving these goals.

Guest Lectures: Insights from Industry Experts

In the academic year 2022-23, our department organized several guest lectures to enhance the knowledge and skills of our students.

Applications of Image Processing on Embedded Systems:

Held from November 5-6, 2022, this lecture was specifically targeted at IV Year students, with 16 participants attending.

Optimal Control Theory and Its Applications in Engineering:

This event took place from October 17-18, 2022, aimed at III Year students, and attracted 37 participants.

These events were instrumental in providing our students with valuable insights and practical knowledge in their respective fields.

Faculty Consultancy and Corporate Training Highlights

Mr. M. Lokanadham:

Mr. M. Lokanadham successfully completed a consultancy project with Ample Technologies, located in Sri Ram Nagar, Alwarpet, Chennai, Tamil Nadu 600018. The project took place from 21st July 2022 to 24th October 2022, generating ₹65,000.00. During this period, he provided valuable insights and expertise to enhance their technological capabilities.

Mr. K. Kiran:

Mr. K. Kiran completed a consultancy engagement with EUTECH Instruments, located in Saraswathipuram, Nandinilayout, Bangalore - 560096. The project spanned from 13th September 2022 to 12th December 2022, generating ₹73,000.00. His efforts focused on optimizing their instrumentation and measurement systems.

We commend our faculty for their dedication and expertise in contributing to industry advancements.

Highlights from Our Recent Seminars

We are pleased to share highlights from our recent seminars, which have provided invaluable learning opportunities for our students.

One Day Seminar on Working and Maintenance of Thermal Power Plant

- **Date:** October 17, 2022
- **Expert:** Mr. P. Jayapal Reddy, Assistant Engineer, RTPP, Kadapa
- **Student Participation:** 72 students (35 from Electrical Engineering + 37 from Mechanical Engineering)

On October 17, 2022, we hosted a one-day seminar focusing on the working and maintenance of thermal power plants. The session was conducted by Mr. P. Jayapal Reddy, an Assistant Engineer at RTPP, Kadapa. The seminar provided valuable insights and practical knowledge to the participating students, who included 35 from the Electrical Engineering department and 37 from the Mechanical Engineering department.

DISTINGUISHED VISITING/ADJUNCT FACULTY FOR THE ACADEMIC YEAR 2022-23

We are honored to have esteemed professionals sharing their expertise with our students. This year's visiting and adjunct faculty have made significant contributions through their specialized lectures and practical insights.

Dr. Jakeer Hussain, Professor

Title: Power Electronics and Embedded Systems
Affiliation: VIT University, Vellore
LECTURE COMMITMENT:

- **WEEKLY:** 3 HOURS
- **MONTHLY:** 12 HOURS
- **TOTAL DURATION:** 16 WEEKS
- **TOTAL INSTRUCTION TIME:** 48 HOURS

Dr. Hussain brings his extensive knowledge and research experience to our classrooms, enriching the academic experience of our students with cutting-edge information and practical applications.

Mr. T. Ramnath Gowd, Assistant Divisional Engineer (ADE)

Title: Power Electronics & its Applications
Affiliation: APGENCO, Muddhanur, Kadapa District
LECTURE COMMITMENT:

- **WEEKLY:** 3 HOURS
- **MONTHLY:** 12 HOURS
- **TOTAL DURATION:** 16 WEEKS
- **TOTAL INSTRUCTION TIME:** 48 HOURS

Mr. Gowd's industry expertise provides our students with valuable insights into the practical aspects of engineering, bridging the gap between theoretical learning and real-world application.

WE ARE GRATEFUL FOR THEIR DEDICATION AND THE IMPACTFUL LEARNING EXPERIENCES THEY OFFER TO OUR STUDENTS.

Internship Participation Announcement

We are proud to announce that more of our students have successfully participated in various internships, gaining valuable hands-on experience in their respective fields.

Electric Vehicle Design

From August 1st, 2022, to August 30th, 2022, the following students participated in an Industrial Electric Vehicle Desihn organized by APSSDC:

- C JYOTHI PRAKASH
- E CHANDU
- M BADRI
- BALA GIRISH
- BARIKI SHASHI KUMAR
- BATHULA MAHESH
- BEEMINENI NAVEEN KUMAR
- CHILAMANI VENKATESH
- CHINNAKOTLA ANIL
- CHINNAPAREDDY GOWTHAM REDDY
- DANDU OMKAR
- DESAI MALLIKARJUNA REDDY
- GANGULA HAREESH
- GAYAM VENKATESWARA REDDY
- J MOUNIKA
- JAMBAIAHGARI RAMESH
- KAPU SHIVA PRASANNA REDDY
- KUMMARA SURESH
- M EEKSHITHA
- MOODLAGIRI HANUMANTHA REDDY
- MUDAGALLU NITHIN KUMAR
- NAGIREDDYGARI CHARAN KUMAR REDDY
- NALAGONDA MAHENDRANATH
- PABBATHI VENKATESH
- BODIREDDY PURUSHOTHAMREDDY
- R PUNEETH
- SAI BALAJI
- SAMBASIVAIAH MADHAN
- SYED MASTHAN VALLI
- TALARI MALLIKARJUNA
- TALLAPUREDDY GNANESWAR REDDY
- UPPU KRISHNA HARINI

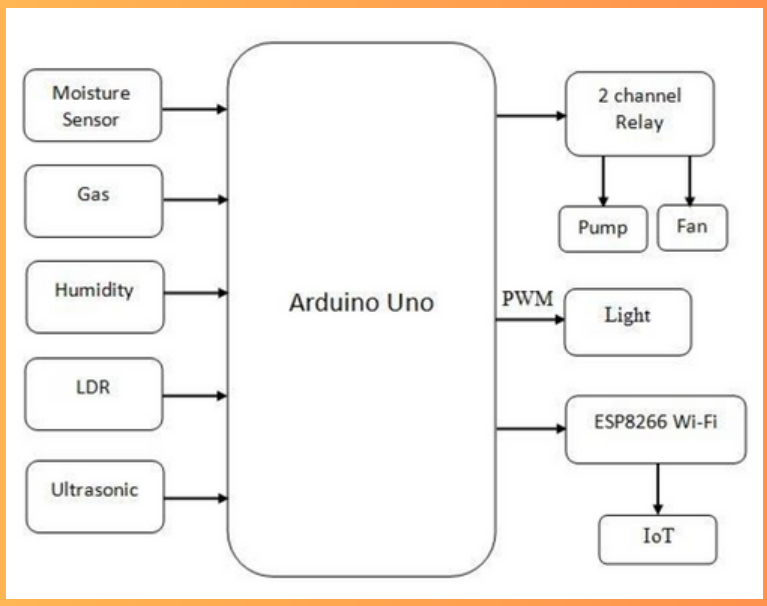
We applaud the hard work and commitment of all these students and look forward to seeing the positive impact they will make in their future endeavors.

Faculty Projects

Active Plant Wall for Green Indoor Climate Based on Cloud and Internet of Things

Abstract:

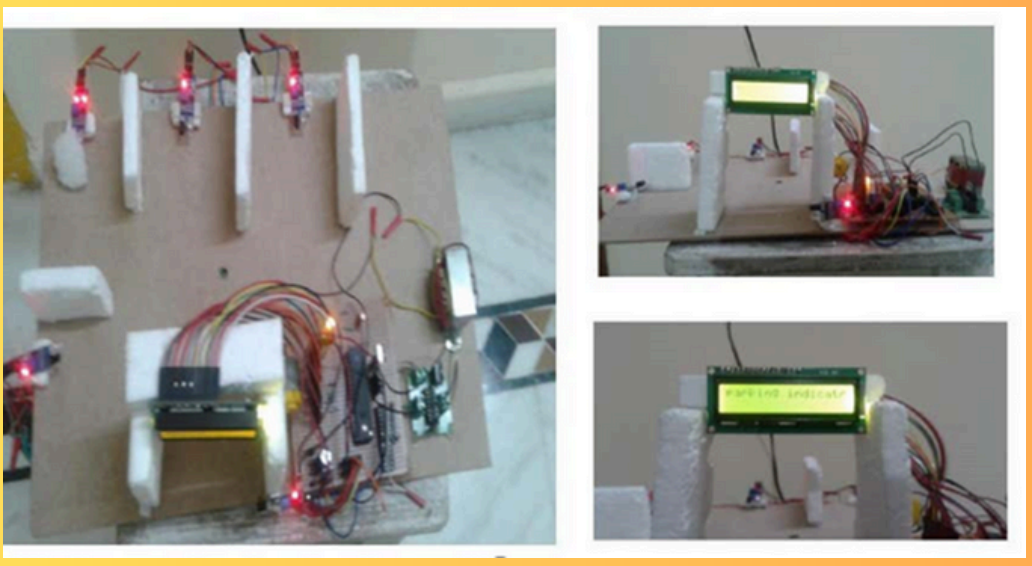
Indoor climate significantly affects human health, well-being, and comfort. An active plant wall system has proven effective in reducing particulate matter and volatile organic compounds, while stabilizing carbon dioxide levels indoors. This project introduces a remote monitoring and control system for plant walls, utilizing Internet of Things (IoT) technology and the Azure public cloud platform. The system automates plant care, enhancing scalability and user experience. Sensors collect environmental data, which is processed in the cloud, activating necessary components like pumps and fans. This innovative approach aims to create a self-sustaining plant monitoring system, promoting a green indoor climate even in low-light conditions.



IR Based Automatic Parking Slot Indicator Using 8051 Microcontroller

Abstract:

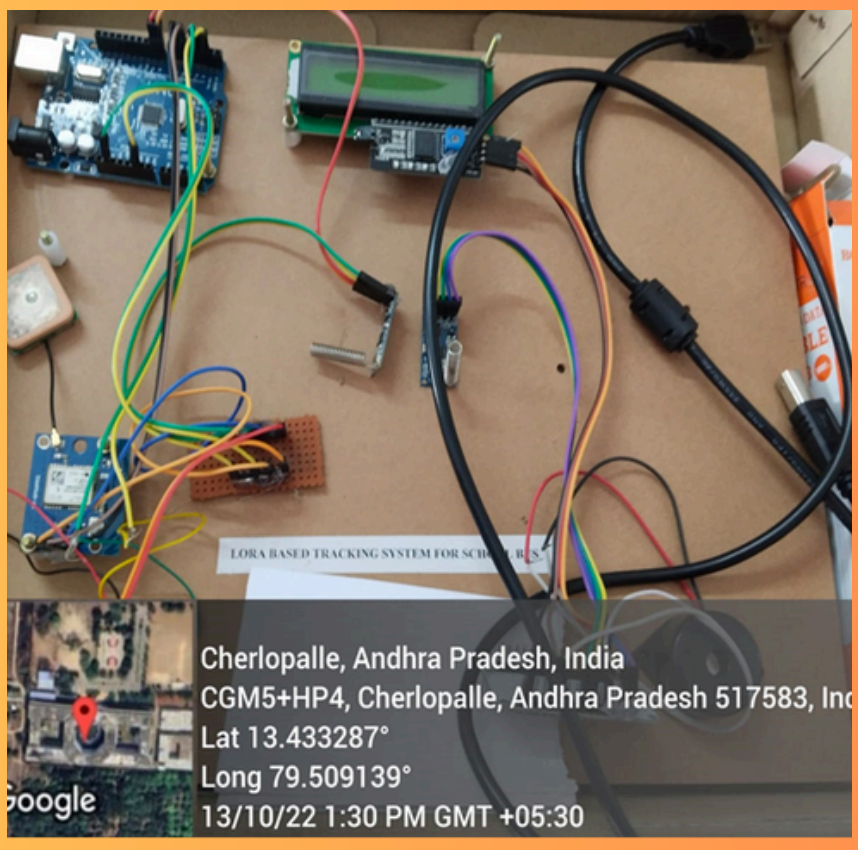
As urbanization increases, efficient car parking management becomes crucial. The Automatic Car Parking System developed in this project addresses space constraints by enabling multi-floor vehicle parking. The system displays available parking slots at the entry gate, automatically adjusting slot availability as cars enter and exit. This technology reduces space wastage and prevents collisions through sensors that detect obstacles, alerting drivers to avoid potential accidents. The implementation of this system in large parking areas can streamline vehicle management and enhance safety.



Health Care Monitoring System Using IoT LoRa

Abstract:

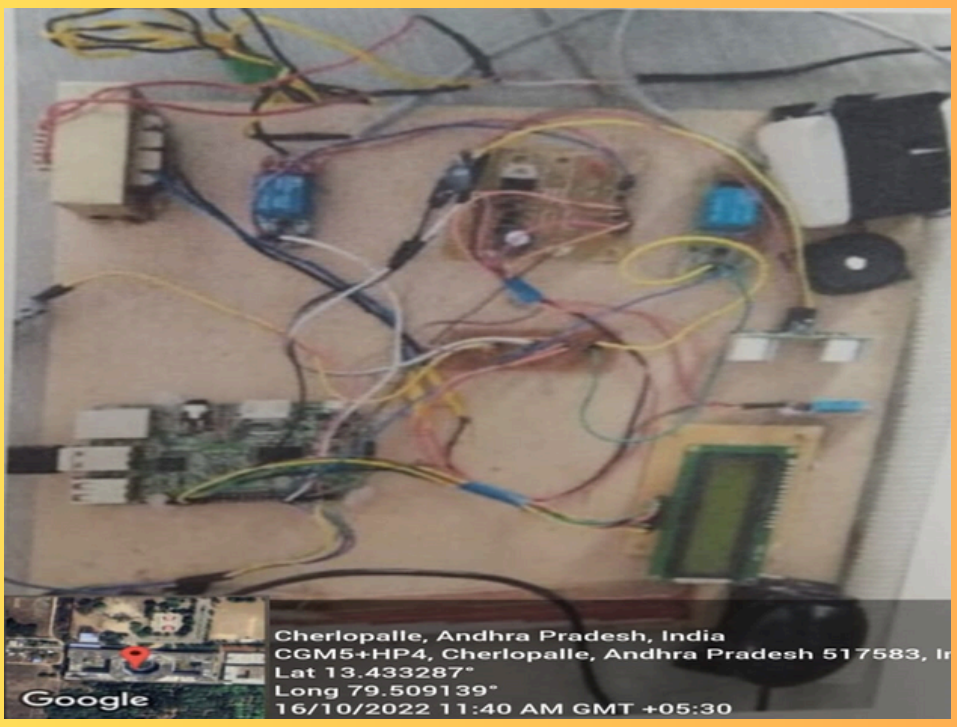
The IoT-based health monitoring system developed in this project leverages My Signals development shield for Arduino Uno, integrating multiple sensors to track patients' vital signs such as temperature, ECG, oxygen saturation, and pulse rate. Data is transmitted wirelessly to a cloud or PC using LoRa technology, enabling continuous and remote health monitoring. This system aims to provide personalized treatment, reduce healthcare costs, and improve patient outcomes, particularly in remote areas with limited access to medical facilities.



IoT Based Smart Irrigation System

Abstract:

Addressing sustainable agriculture, this project focuses on smart irrigation using IoT and sensory systems. Automated irrigation enhances water-use efficiency, contributing to the United Nations Sustainable Development Goals. The system monitors soil and weather conditions, optimizing water management and reducing environmental impact. By integrating advanced sensors, farmers gain insights into crop needs, leading to better resource conservation and operational efficiency. This review outlines the benefits and challenges of implementing sensory-based irrigation, offering a comprehensive understanding for researchers and practitioners in the agricultural sector.



These innovative projects highlight the faculty's dedication to developing cutting-edge solutions for real-world problems, contributing significantly to technological advancement and sustainability.

Strengthening the Academic-Industry Bridge

In our ongoing commitment to integrate academic learning with industry demands, we have organized a series of impactful workshops and seminars. These initiatives aim to equip students with essential skills and knowledge while addressing current industry requirements and global challenges.

Research Methodology

To bolster the research skills of our engineers, a 3-Day Workshop on **Research Methodology** was conducted from 20th December 2022 to 22nd December 2022. This workshop was led by Dr. R. Venkataramana and Dr. M. Hendra Kumar, with 47 students in attendance. The workshop addressed POs 1, 2, 3, 5, 9, 11, and 12.

Awareness and Conservation

In our commitment to raising awareness about global warming and climate change, we organized the National Energy Conservation Day on 14th December 2022. Dr. T. Sunil Kumar Reddy led this event, which was attended by 20 students. The event was in line with POs 1, 6, 7, 8, 10, and 12, and PSO 2, promoting efforts towards saving energy resources.

These initiatives underscore our dedication to equipping our students with the necessary skills and knowledge to excel in their careers while fostering a sense of responsibility towards global challenges.

TRAINING AND PLACEMENT ACTIVITY

S.No	Date	Name of the Training/Event	Name of the organization/Re-Source Person
1	30.06.2022	How to Build a Professional Resume	Mr. Merupula Mahesh
2	04.07-2022 to 09.07.2022	REVAMP- C & Data Structures	Mr. K. Satish Babu Mr. V Vishnu Vardhan
3	14.07.2022 to 20.07.2022	REVAMP- Python Programming & DBMS	Mr. K. Satish Babu Mr. V Vishnu Vardhan
4	25.07.2022 to 30.07.2022	Student Training Enrichment Program (STEP)- To meet Corporate Needs	Mr. Merupula Mahesh
5	01.08.2022 to 06.08.2022	TCS Company Specific Training	Seventh Sense Talent Solutions, Bangalore
6	13.08.2022	Trends of IT Hiring	Mr. Nagarjuna Malladi, Tech Mahindra
7	18.08.2022	How to Win GATE	ACE Academy, Hyderabad
8	30.08.2022 to 03.09.2022	Aptitude Training (Quantitative Ability)	Mr. M. Sambaraju Mr. A. Sukumar Ms. N. Alekhya
9	08.10.2022	From Student to Engineer: A Roadmap to Success	Mr. Ramachandra, Motivational Speaker
10	17.10.2022 to 22.10.2022	Technical Training on C & Data Structures	Mr. K. Satish Babu Mr. V Vishnu Vardhan

https://svpcet.org

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