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THE SPARK

Igniting Innovations

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

MAR 2025

UNIVERSITY COLLEGE OF ENGINEERING KAKINADA (A)
JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

Inside

ACHIEVEMENTS

Congratulations!

for getting placed in

TATA CONSULTANCY SERVICES

N. BALAJI NAIK
22025A0260

D. VIGNESH
21021A0229

C V HEMANTH BHAVANI SAI SREENIVAS
21021A0235

U.V.S SATYA SAI SRIVATSA
21021A0236

BALUM KARTHIK
21021A0202

K.VARA PRASAD
21021A0242

As a Graduate Engineer Trainee with CTC of 4.5LPA

ENCURSO 2025

- Ms. V. Kavya Sri, a second-year student, secured First Prize in the “Paper Presentation” on Oxygen Suffocation and Counter Measures, organized by the ENCURSO2K25 Paper Presentation team, held at the Department of Electrical and Electronics Engineering, UCEK (JNTUK).

- Mr. T.R.S Karthik, a final-year student, secured Second Prize in the “Novel-Drive-by-Wire Scheme with integrated throttle and Brake for an EVs, organized by the ENCURSO2K25 Paper Presentation team, held at the Department of Electrical and Electronics Engineering, UCEK (JNTUK).

GATE 2025

- Mr. B. Divakar (20021A0213) secured an All India Rank (AIR) of 34 in the Instrumentation Engineering paper and an AIR of 60 in the Electrical Engineering paper in the GATE 2025 examination.

- Mr. R. Chaitanya (20021A0214) secured an All India Rank (AIR) of 105 in the Instrumentation Engineering paper and an AIR of 285 in the Electrical Engineering paper in the GATE 2025 examination.

- Mr. K. Lokesh, a final-year student, secured an AIR of 519 in the Electrical Engineering paper in the GATE 2025 examination.

- Mr. J. Sai Sri Harsha (19021A0205) secured an AIR of 692 in the Electrical Engineering paper and an AIR of 1433 in the Electronics and Communication Engineering paper in the GATE 2025 examination.

- Mr. T. Karthik Raghav Sai, a final-year student, secured an AIR of 807 in the Electronics and Communication Engineering paper in the GATE 2025 examination.

- Mr. B. Sai Ganesh (19021A0201) secured an AIR of 982 in the Electronics and Communication Engineering paper in the GATE 2025 examination.

- A former student, 9 students from IV B.Tech, 1 student from III B.Tech qualified in the GATE 2025 examination.

Congratulations!

to our students for qualifying and achieving remarkable ranks in the GATE 2025 examination.

EVENTS AND WORKSHOPS

ENCURSO 2K25

ENCURSO 2K25 was not just another technical symposium—it was a celebration of ideas, creativity, and the spirit of engineering in motion. Organized by the Department of Electrical and Electronics Engineering, UCEK (JNTUK), this national-level fest brought together students, innovators, and thinkers on a shared platform of learning and discovery.

What made ENCURSO 2K25 truly unique was its powerful theme: “In Progress.” Derived from the Spanish word "ENCURSO", the name itself reflected the core belief of the symposium—that growth, learning, and innovation are never-ending journeys. This wasn’t just about showcasing achievements, but about embracing the process of continuous improvement.

The fest encouraged students to move beyond theory and dive into real-world problem-solving. From presenting research papers and projects to participating in workshops and technical events, every activity was designed to spark curiosity and promote interdisciplinary learning.

More than anything, ENCURSO 2K25 stood as a reminder that in the world of engineering, nothing is ever truly complete. Every idea, every solution, and every breakthrough is simply a step forward—a part of something bigger, still evolving.

Whether it was a first-time presenter nervously sharing their idea or an experienced student leading a workshop, everyone was united by one thought: progress never stops. And neither should we.

INAUGURAL CEREMONY

The inauguration of ENCURSO 2K25, along with TORQUE (MEC), ESPARX (ECE), ZEIGEIST (CSE), and SPE-INDHAN (CHEM & PETROLEUM), was held on 15th March 2025 at the Alumni Auditorium, UCEK. The ceremony marked the official launch of the much-awaited National Level Technical Symposiums across various departments.

The event was graced by Mr. V. Venu Gopal Rao Garu, Vice President of Engineering Services at Reliance Industries, as the chief guest, along with eminent dignitaries from JNTUK including the Vice Chancellor, Registrar, Rector, Principal, Vice Principals, and HODs of all departments. Their presence added prestige and encouragement to the student community.

The ceremony began with a sapling plantation and traditional lamp lighting, symbolizing growth and enlightenment. Student coordinators presented reports on their respective tech fests, with Ms. Ch. Pragya representing the EEE department and outlining the exciting lineup of events.

The highlight of the event was the unveiling of department souvenirs, representing unity and innovation across the disciplines. With the vote of thanks wrapping up the event, the auditorium buzzed with energy and enthusiasm, setting a perfect tone for the two-day tech extravaganza ahead.

As part of our dynamic workshops, students had the incredible opportunity to get hands-on experience with cutting-edge technologies, including Drone Technology, Internet of Things (IoT), Electric Vehicles, and MATLAB Simulation.

HANDS-ON DRONE TECHNOLOGY

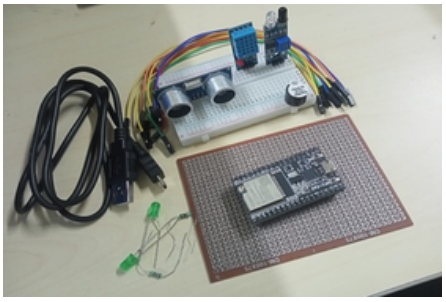
The objective of this workshop was to provide participants with hands-on experience in drone technology. Attendees gained insights into drone operation, aerial photography, safety measures, and real-world applications. The student coordinators were A. Prasanna Kumar and D.L.V.G. Aparna with a team of 5 students. The resource persons were Mr. Dola Sundeep and Mr. Althaf from IITDM, Kurnool and D. AKHIL ,a researcher on Drones at TiHAN, IITH. A total of 99 participants registered for the workshop out of which 83 participants from LAKKIREDDY BALIREDDY COLLEGE OF Engineering, 6 participants from MVGR college of Engineering, 9 participants from International School of Technology and Sciences for Women and 1 participant from GIET Engineering college.

The drone training program consisted of three key sessions. In the first session, participants learned the theoretical aspects of a drone's components, including the frame for structure, motors and propellers for lift and movement, ESCs for motor speed control, and the battery for power. The flight controller, described as the drone's brain, processes sensor data from the IMU and GPS to stabilize and control flight. The second session covered the assembly process, where participants attached motors, propellers, ESCs, and the flight controller to the frame, wired the components, connected the battery, and calibrated the system. The final session provided hands-on experience with drone calibration and flight. Participants learned to power on the drone and controller, establish a connection, and control altitude and direction using the joysticks. Emphasis was placed on steady control, battery monitoring, and safe landing practices.

Hands on IOT

In this two-day workshop, we offered an immersive experience into the world of the Internet of Things (IoT) with ESP32 module. A total number of 30 students were participated in this workshop. A team of 5 members from GIET ENGINEERING COLLEGE, a team of 5 members from ISTS for women, and some of the participants are from KL University, Amrita Vishwa Vidyapeetham, and Mohan Babu University were registered for this workshop. And some of the interested students from our college were also participated in this workshop. The sstudent coordinators were J.Mukesh Babu And E. Yasaswini with a teamof 5 students. The resource persons were Mr. Sudheer Reddy, Founder and CEO of SSIT and Ms. Degala Saranya, IoT Firmware engineer at SSIT.

The IoT training program covered three comprehensive sessions. In the first session, students were introduced to the Internet of Things (IoT), including its definition, key characteristics, and real-time applications. They explored IoT architecture, communication protocols, and security measures, and were introduced to ESP32 development using the Arduino IDE.



The second session focused on controllers, their types, characteristics, and applications, along with sensors and actuators. A hands-on LED toggling exercise reinforced these concepts. The third session involved practical work with an ESP32 and a DHT11 sensor to measure temperature and humidity, displaying real-time data on the Thing speak channel. Participants also learned about object detection using a PIR sensor, including its connection and coding.

By the end of these sessions, students had gained hands-on experience in IoT and developed the capability to write their own programs. The workshop concluded with a discussion on career opportunities and the essential skills required in the field of IoT, leaving participants inspired and informed about their future prospects in this rapidly evolving domain.

Hands on Electric Vehicles

The Electric Vehicles (EV) Workshop was a thrilling and eye-opening experience, coordinated by P. Rohit Sai Teja and B. Thulasi with the support of a vibrant five-member team. Guided by experts Mr. Vivek Kumar Singh and Mr. Beesetti Lokesh from Royal EV Manufacturing Company, Visakhapatnam, the workshop dived deep into the future of mobility.

The program kicked off with a dynamic introduction to EVs — covering their evolution, advantages like energy efficiency and low emissions, and challenges such as battery costs and infrastructure needs. Students got a clear comparison between EVs and traditional two-wheelers, before moving to hands-on sessions where they explored EV components, battery technologies, and the nuts and bolts of EV assembly and disassembly.
Participants were split into groups for real-world experience: one team focused on putting together and taking apart EVs, while the other delved into battery testing, design, and maintenance — from Lithium-Ion to Lead-Acid. The excitement peaked in the final session with live demonstrations of EV performance, regenerative braking, and energy usage, followed by an open discussion on the bright future of electric mobility.

By the end of the workshop, students walked away not just with technical knowledge, but with real skills and a passion for driving the electric revolution forward!

Hands on MATLAB simulation

The MATLAB Simulation Workshop was an exciting two-day journey into the world of technical computing, coordinated by P. Manikantha and M. Amrutha Vani with a fantastic team of five members. A total of 39 students took part, with participants from Pragati Engineering College, Lakireddy Balireddy College of Engineering, and Bonam Venkata Chalamayya Engineering College. Leading the sessions were our expert resource persons, Dr. Ch. Suresh from VVIT and Dr. Rohith Balaji Jonnala from SVECW (A), Bhimavaram.

The workshop kicked off with the basics of MATLAB—getting familiar with the interface, data handling, plotting, and mathematical operations. Moving ahead, participants dived into programming essentials like decision-making, loops, functions, and debugging techniques.
In the next phase, Simulink stole the spotlight, introducing students to the modeling and simulation of dynamic systems, especially geared toward electrical engineering applications. Finally, everyone got hands-on with circuit design, assigning values, and output analysis.
By the end of the workshop, students didn't just learn MATLAB and Simulink—they mastered tools that will power their future in engineering and innovation!

EVENTS

As part of the ENCURSO 2k25 celebrations, several exciting events were organized, including a Paper Presentation, a Project Expo, a thrilling Watt-A-Quiz, and a creative Photography Contest, providing students with vibrant platforms to showcase their skills and talents.

PAPER PRESENTATION

The Technical Paper Presentation at ENCURSO 2k25 was a showcase of brilliance and innovation, held on March 15, 2025, at the EEE Department, JNTUK. Coordinated by third-year students Ch. Shathvik, A. Meghana, and B. Siva Kumar, the event saw 20 teams and 28 participants competing fiercely. With 19 teams from JNTUK and one from Andhra Loyola Institute of Science and Technology, the competition was intense and inspiring. Papers were judged on technical depth, originality, and relevance by faculty members Ms. K. Joshi Rani and Smt. K. Vijaya Bhanu, ensuring only the best ideas shined through.

PROJECT EXPO

The Project Expo at ENCURSO 2k25 lit up the EEE Department on March 15, 2025, with four brilliant projects — two software and two hardware — displayed by 11 talented students. Projects like Farm Fusion, Battery Management System, Smart Glasses for the Blind, and Sboard EV with Solar Backpack impressed the audience and judges. Dr. K. Bapayya Naidu and Ms. K. Joshi Rani led the evaluation, making it an inspiring day of innovation and creativity!

The Smart Glasses for the Blind project by Sappati Chennakesava Durga Prasad and Sakalabathula Abhinandana from Sir C.R. Reddy College of Engineering won the Project Expo! Their innovation, aiding the visually impaired, earned them a ₹3000 cash prize and a merit certificate. Huge kudos to all participants!

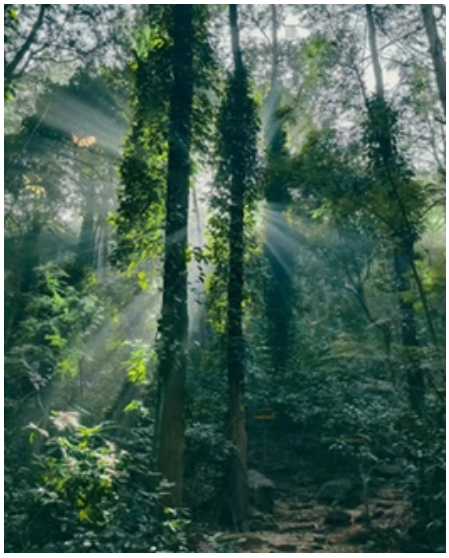
WATT A QUIZ

Watt-a-Quiz brought a burst of excitement to ENCURSO Fest, offering a lively, non-technical challenge designed to be fun and accessible for everyone — whether engineering expert or enthusiast. A total of 8 teams competed fiercely across three elimination rounds, making the competition thrilling and unpredictable. The event was conducted under the expert supervision of Assistant Professor Dr. C. Naga Kotta Reddy, who served as the quizmaster, ensuring smooth proceedings and a fair contest. Thanks to his guidance, Watt-a-Quiz turned into one of the most engaging highlights of the fest!

D. Satyendra and S. Mohan from UCEK, JNTUK won Watt-a-Quiz, bagging a ₹2500 cash prize!

PHOTOGRAPHY CONTEST

The Photography Contest at ENCURSO 2k25 saw 17 creative entries from students across various colleges! After 14 days of submissions and tough competition, one talented winner took home a ₹500 cash prize. Big shoutout to all the amazing photographers who captured the spirit of the fest!



1st place: Tarun (UCEK JNTUK)

2nd place: R. Harsha (UCEK JNTUK)

STUDENT ACTIVITIES

BROCHURE AND POSTER DESIGN

The brochure and poster for ENCURSO 2k25, designed by Thota Sai Govinda Krishna, Dangeti Krishna Murali, and Ponnaganti Sai Charan, brilliantly captured the fest's spirit! Highlighting workshops and events like IoT, EVs, Drone Tech, and Watt-A-Quiz, the designs combined a modern, techy vibe with clear, eye-catching layouts.

1: POSTER ENCURSO 2K25

2: BROCHURE PAGE 1

3: BROCHURE PAGE 2

SOUVENIR DESIGN

The ENCURSO 2k25 souvenir beautifully captured the fest's essence, featuring inspiring messages from key dignitaries such as Prof. C.S.R.K. Prasad (Vice Chancellor), Dr. V. Ravindranath (Registrar), Dr. K.V. Ramana (Rector), Dr. N. Mohan Rao (Principal, UCEK), Dr. G.V.S.R. Deekshitulu (Vice Principal Academics), Dr. M. Swaroopa Rani (Vice Principal Administration), Prof. K. Venkata Reddy (HOD, EEE), and Dr. N. Sumathi (Associate Professor).
It highlighted the department's vision, mission, and program objectives, along with an overview of the faculty and fest committee. The souvenir also showcased workshops on MATLAB Simulation, Electric Vehicles, and IoT, along with events like Paper Presentation, Project Expo, and Watt-A-Quiz. Richly illustrated with images from all B.Tech years, it celebrated the dedication of students, faculty, and sponsors that made ENCURSO 2k25 a resounding success.

WEBSITE DESIGN

ENCURSO 2K25, a National Level Technical Symposium at UCEK, JNTUK, on March 15-16, 2025, is designed by students Sinagam Sai Krishna, Dangeti Krishna Murali, Tippasani Naveen Reddy, and Rayudu Kanaka Yasaswini Satya Sri. The website features workshops on IoT, Electric Vehicles, Drone Technology, and MATLAB Simulation, along with events like Paper Presentation, Code Hackathon, Circuit Clash, and more. The "Registration" section collects participant info and generates a unique Encurso ID for event and workshop registration.

STALLS

DECORATION

LIGHTNING

CULTURALS

VALEDICTORY CEREMONY

The Electrical and Electronics Engineering (EEE) Department conducted a Valedictory Ceremony on 16th March to honour the success of ENCURSO 2K25 Tech Fest. The event was graced by the presence of faculty members and students, making it a memorable occasion. The ceremony commenced with a warm welcome by Ch. Pragya. Following this, certificates were awarded to recognize outstanding performances, in the presence of the Convener Dr. K. Venkata Reddy and Faculty Coordinator Dr. N. Sumathi. The student coordinators, namely P. Harsha, Ch. Pragya, R. D. Pavan Kumar, and Ch. Sravanthi, delivered speeches reflecting on the successful execution of ENCURSO 2K25 and the valuable experiences gained from it. The Convener Dr. K. Venkata Reddy and the Faculty Coordinator Dr. N. Sumathi addressed the gathering with inspiring speeches, highlighting the importance of perseverance and lifelong learning. The ceremony concluded with a heartfelt vote of thanks by B. Kavya, expressing gratitude to the faculty, staff, and organizers for their dedication and support in making the event a success. The Valedictory Ceremony was a significant event, marking a meaningful transition for the students as they move forward into the next phase of their academic and professional journeys. The event concluded with group photographs of 1st, 2nd, and 3rd-year students alongside faculty and staff members, capturing the essence of a successful and memorable event.

Faculty with 2nd year students

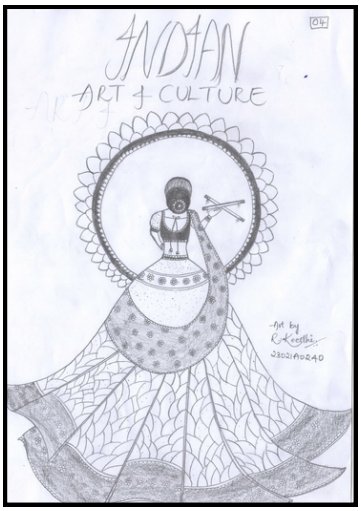
Faculty with 1st year students

Faculty with 3rd year students

ARTS AND CULTURALS

Sai sri
II BTech 23021A0252

Kavya Sri
II BTech 23021A0250



R. Keerthi
II BTech 23021A0240

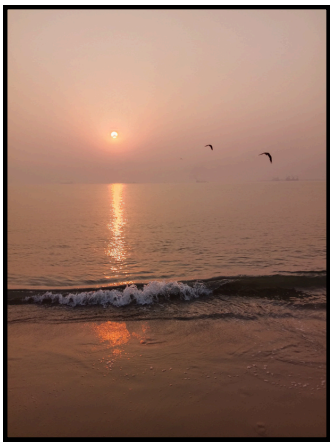
K. Sravanthi
III BTech 22021A0239

M. Snehita
I BTech 24021A0227

N. Neha
I BTech 24021A0203

Photography

P. Veena Sriveni
I BTech 24021A0235



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The Spark

Igniting Innovations

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