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ELECTRICAL AND ELECTRONICS
ENGINEERING

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

Inside



01 ACHIEVEMENTS

04 COMMUNITY
SERVICE PROJECT

02 ARTICLES

05 ARTS &
CULTURALS

03 FACULTY
DEVELOPMENT
PROGRAMS

06 CREATIVE
WRITING



ACHIEVEMENTS



- Dr. K. Ravindra, Professor, was appointed as the Director of the Internal Quality Assurance Cell (IQAC) and Capacity Building under the Administrative Department of JNTUK, Kakinada, in June 2025.



- The National Board of Accreditation (NBA) has granted accreditation to all the undergraduate programs—Civil, Electrical and Electronics Engineering (EEE), Mechanical, Electronics and Communication Engineering (ECE), Computer Science Engineering (CSE), Chemical Engineering (CHE), and Petrochemical Engineering (PE)—based on the compliance report for the academic years 2025-2026 through 2027-2028, valid until June 30, 2028. Congratulations to all staff members, including teaching and non-teaching personnel, as well as the students, for their dedicated efforts in achieving this significant milestone.

Internships

We are proud to announce that students from III B.Tech have been selected for one-month internships across various esteemed organizations. This achievement marks a significant milestone in their professional journeys and a step toward a bright future!

- **IIT Bhubaneswar – 2 students** (22021A0217, 22021A0224)
- **Andhra Electronics Pvt. Ltd. – 16 students** (22021A0211, 22021A0212, 22021A0214, 22021A0218, 22021A0226, 22021A0229, 22021A0235, 22021A0237, 22021A0240 , 23025A0254, 23025A0255, 23025A0256, 23025A0258, 23025A0260, 23025A0263)
- **RINL, Visakhapatnam – 13 students** (22021A0216, 22021A0221, 22021A0222, 22021A0228, 22021A0232, 22021A0236, 22021A0238, 22021A0241, 22021A0243, 22021A0244, 22021A0245, 22021A0249, 22021A0250)
- **CODEC Technologies – 11 students** (22021A0202, 22021A0206, 22021A0207, 22021A0209, 22021A0220, 22021A0223, 22021A0225, 22021A0246, 23025A0257, 23025A0259, 23025A0261)
- **ADANI WILMAR – 3 students** (22021A0203, 22021A0208, 22021A0213)
- **VTPS, Vijayawada – 2 students** (22021A0227, 23025A0267)
- **NTPC, Visakhapatnam – 2 students** (22021A0233, 22021A0234)
- **Steel Exchange India Ltd. – 1 student** (22021A0248)
- **Coromandel International – 1 student** (22021A0251)
- **3F Industries Pvt. Ltd. – 1 student** (23025A0266)
- **Gowthami Solvents Oil Pvt. Ltd. – 1 student** (23025A0265)
- **Narla Tata Rao Thermal Power Plant – 1 student** (22021A0239)
- **Amara Raja Group – 1 student** (22021A0215)

“Congratulations to all the selected students for their dedication and efforts. May this internship experience pave the way for many more achievements to come!”

India's Unsung Heroes

The IAS and IPS Officers Who Keep the Nation Running

When we speak of national service and heroism in India, the spotlight often falls on soldiers, politicians, and sometimes entrepreneurs or athletes. However, behind the scenes, a quiet and relentless force works every day to ensure the stability, security, and development of the country — India's bureaucrats, particularly those in the Indian Administrative Service (IAS) and the Indian Police Service (IPS).

The Backbone of Governance:

IAS officers are the administrative architects of India. From district collectors managing rural development to secretaries shaping national policy, IAS officers are deeply embedded in the nation's governance. They are tasked with implementing government policies, managing disasters, overseeing elections, and ensuring that welfare schemes reach the last mile. While politicians make the laws, it is the bureaucrats who turn them into reality. Whether it's coordinating relief during a natural calamity or ensuring that a village school runs effectively, IAS officers are on the frontlines — often without recognition.



The Silent Sentinels: IPS Officers

On the other hand, IPS officers are entrusted with maintaining law and order, preventing crime, and ensuring the internal security of the nation. In a country as vast and diverse as India, this is no easy task. From tackling terrorism in conflict zones to resolving local law-and-order disputes, IPS officers operate under intense pressure, often at personal risk. While police reforms are a constant topic of debate, the dedication of many IPS officers to justice and integrity often goes unnoticed. Many serve in insurgency-affected areas for years, combating extremism with resilience, all while working to win the trust of local communities.



IPS

INDIAN POLICE SERVICE

Challenges They Face

Despite their vital role, IAS and IPS officers face: Political interference, which can hinder their ability to act impartially. Transfers and job instability, sometimes used as punishment for honesty. Mental and emotional toll, due to long hours, stress, and working in volatile areas. Limited public recognition, with media often focused on failures or scandals rather than success stories.

Why They Matter Now More Than Ever

As India grapples with rapid urbanization, environmental challenges, cybersecurity threats, and social inequalities, the role of civil servants becomes even more critical. A committed and empowered bureaucracy is essential for inclusive growth, public trust, and responsive governance.

Conclusion: Celebrating Quiet Leadership

India's IAS and IPS officers may not seek the limelight, but their work shapes the very foundation of the nation. They are problem-solvers, crisis-managers, reformers, and bridge-builders between policy and people.

As citizens, recognizing and supporting the honest efforts of bureaucrats is essential. They are not just administrators; they are nation-builders — unsung heroes in every sense of the word.



Kiran Bedi First female IPS officer

Written by:

PADHAM SRINADH

III B.Tech 24025A0257

FACULTY DEVELOPMENT PROGRAMS

One week offline Faculty Development Program on “Empowering Future Needs - AI Driven Electric Vehicles in Smart Grid Systems - Challenges and Opportunities”, from 16th to 20th June 2025, Organized by Dept. of EEE, UCE, JNTUK, Kakinada In association with Dept. of EEE, SRK Institute of Technology, ENIKEPADU. This FDP is coordinated by **Dr. Ch. Sai Babu, Professor**, Dept. of EEE, UCE, JNTUK **Mr. S. Nageswara Rao, Assistant Professor & Head**, Dept. of EEE, SRKIT. This FDP is conducted at A-BLOCK, SEMINAR HALL, SRK Institute of Technology (Autonomous) ENIKEPADU, VIJAYAWADA Andhra Pradesh

The FDP is focused on the following key objectives:

- Understand the evolving architecture of Electric Vehicle systems in modern smart grids.
- Analyze smart charging infrastructure, V2G technology, and AI-enabled solutions.
- Study the role of advanced power electronics and control systems in EV performance.
- Explore the integration of AI, IoT, and intelligent drive systems in future mobility.
- Gain insights into testing methodologies, simulation environments, and practical case studies related to EVs and smart energy systems

A 5 DAY OFFLINE FACULTY DEVELOPMENT PROGRAM ON “Applications of Artificial Intelligence in Electrical Engineering: An Academic and Research Perspective” from 23rd to 27th June 2025 ORGANIZED BY Dept. of EEE, UCE, JNTUK, Kakinada In Collaboration with Dept. of EEE, Sri Vasavi Engineering College, Tadepalligudem. Coordinated by Coordinators **Dr. T. Murali Mohan, Professor, Dept. of EEE, UCE, JNTUK** **Dr. D. Sudha Rani, Professor & Head, Dept. of EEE, SVEC** conducted at Sri Vasavi Engineering College (Autonomous) Tadepalligudem, West Godavari District Andhra Pradesh.

Upon completion of this FDP, participants will be able:

- AI/ML Basics: Understand core AI and ML concepts for electrical engineering.
- Smart Grids: Apply ML to grid monitoring, fault prediction, and automation.
- Power Systems: Use Deep Learning for fault detection and diagnostics.
- Renewables: Optimize batteries and energy flow using AI techniques.
- Practical Skills: Build ML models in Python and MATLAB for Electrical Engineering problems.
- Curriculum & Research: Guide projects and integrate AI/ML into teaching.

A 5 DAY OFFLINE FACULTY DEVELOPMENT PROGRAMME on “Sustainable Drives: Renewable Energy Solutions for Electric Vehicle Systems” from 16th – 20th June 2025 Organized by Dept. of EEE, UCE, JNTUK, Kakinada In association with Dept. of EEE, Vishnu Institute of Technology, Bhimavaram. Coordinated by **Dr. T. Murali Mohan, Professor, Dept. of EEE, UCE, JNTUK** **Dr. RVD Ramarao, Professor & Head, Dept. of EEE, VITB**

The FDP is focused on the following key objectives:

- Overview of Electric Vehicle Systems and Sustainable Mobility Concepts.
- Integration of Renewable Energy Sources for EV Charging
- Energy Storage Technologies and Battery Management in EVs
- Power Electronics and Control Systems for EVs
- Smart Charging Infrastructure and Vehicle-to-Grid (V2G) Technologies
- Design and Simulation Tools for EV and Renewable Energy Integration
- Challenges, Opportunities, and Case Studies in Sustainable E-Mobility.

A 5-DAY FACULTY DEVELOPMENT PROGRAM ON CUTTING EDGE TECHNOLOGY (FDP4CET-02) Nanotechnology Applications to Electrical Engineering 2nd - 6th June, 2025 Venue: Swarnandhra College of Engg. & Tech. (A), Narsapur, Organized by Faculty Development Centre, JNTUK In Association with Department of EEE UCEK(A), JNTUK, Kakinada and Department of EEE, SCET, Narsapur coordinated by **Dr. N. Sumathi, Associate Professor, Dept. of EEE, JNTUK Kakinada**

Topics to be covered:

- Introduction to Nanotechnology & Interdisciplinary Applications
- Nanomaterials in Transformers & Insulation Systems
- Nanoparticle Synthesis & Characterization Techniques
- Nanocoatings for Electrical Insulation Optical & Dielectric Properties of Nanomaterials
- Advances in Nanotech for Energy & Electronics Hands-on: Nanoparticle Synthesis & coating
- Industrial Applications & Case Studies

COMMUNITY SERVICE PROJECT

II B.Tech II sem students have completed their summer community service project at the INDIAN RED CROSS SOCIETY, KAKINADA started on May 13 and continued for 2 months. In this time they have visited old-age homes, green field blind school, orthopedic school, women skill development centre etc.,

On June 5th, 2025, on the occasion of World Environment Day, II B.Tech II sem students visited Rangaraya Medical College, Kakinada, as part of a program organized by the Red Cross Society under the Government of Andhra Pradesh. The event was graced by the Chief Guest, Shri Sagili Shan Mohan, IAS, District Magistrate, along with Kakinada SP Bindu Madhav, IPS. Both dignitaries delivered speeches on environmental conservation and presented prizes to school students for their artwork. Everyone at the event took a pledge to protect the environment and to avoid the use of single-use plastics. The event concluded with the planting of trees by the esteemed guests.



On the first day, they visited the Orthopedically Handicapped Boys School in Kakinada, where they explored the hostels, classrooms, and other facilities. They paid close attention to the arrangement and upkeep of the living quarters and educational spaces, noting how the environment was designed to provide comfort and accessibility for the students. The group observed the hygiene practices, nutritional arrangements, provision of uniforms, and the overall care given to meet the day-to-day needs and welfare of the residents.

On their second day, the students visited the Indian Red Cross Old Age Home in Rayadupalem, Kakinada. They spent quality time interacting with the senior residents, listening to their inspiring stories and gaining valuable guidance on leading a fulfilling and healthy life. The in-charge provided detailed insights into the residents' backgrounds, daily care routines, and reasons for joining the home. They highlighted the implementation of the 'Wellness Project,' which focuses on the physical, recreational, spiritual, and cultural well-being of the residents. Furthermore, the home ensures that nutritious vegetarian meals are served to all. Subsequently, the group visited the Green Fields Blind School in Achampeta, where they were deeply moved by the resilience and spirit of the students, leaving with a profound sense of gratitude.



COMMUNITY SERVICE PROJECT

On 13th June 2025, 11 donors have donated blood to Indian red cross blood bank as they have seen the thalassemia patients transfusing their blood once every month. 2nd years have attended yoga sessions held at yoga centre, vivekananda park, kakinada for one week and have participated in Yogandhra and got certificates.



An interactive session with the Vice Chancellor of Aditya University, Kakinada, focused on academic excellence, personal growth, and career development. He emphasized discipline, time management, and confidence-building while encouraging students to overcome stress with a positive mindset. Guidance was also given on using online courses and digital platforms to enhance skills and remain competitive. The session left students inspired to pursue their goals with determination.

COMMUNITY SERVICE PROJECT



On the day of valedictory ceremony, our Honorable Vice Chancellor Prof. C. S. R. K. Prasad, Dr. K. Venkata Reddy Professor and Head of the EEE department had visited Indian Red Cross Society and addressed the importance of visiting community which will help the engineers to understand the society better and innovate things related to the problems.



VC sir addressed us about the importance of Yoga and later his experiences on working with Indian Red Cross. He appreciated the class for doing this community service project in Indian Red Cross. He mentioned the importance of these NGO's and their role in helping the society. Later our HOD sir addressed the gathering and felt happy for our active participation. He spoke few words CSP and its importance in student academics.



Later in the ceremony all II B.Tech II Sem students were given internship certificates from Shri. Y.D.RAMA RAO garu, Chairman, Indian Red Cross Kakinada.

ARTS AND CULTURALS



G. Manikanta
III B.Tech



B.Shankar
II B.Tech



K. Hemanth
III B.Tech



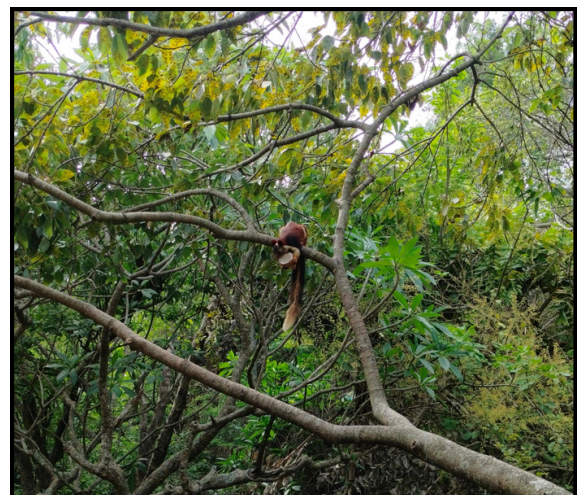
B. Neha
II B.Tech



J. Eeshitha smile
II B.Tech



A. Prashanth
II B.Tech



M. Akash
III B.Tech

CREATIVE WRITING

MIRROR LIFE Part 1

Amar was the owner of a large company in a modern high-rise full of offices and glass walls. He had everything people dream of—luxury cars, a huge apartment, power, and respect. But his days felt empty. He lived in routine, pressured by his parents to run the family business, hiding the one thing he truly loved: painting. That passion had been buried under meetings, deadlines, and expectations. On his right wrist, he always wore a simple black band—a quiet reminder of himself that no one else understood.

In the same building, just across the floor, worked Rama, a cheerful girl from a middle-class family. She had a stable job in a small firm, rode her scooty to work, and lived a simple life—but a joyful one. She was left-handed, sharp-minded, and full of warmth. Her laughter filled the office corridors. She made the most of what she had—shared lunches, rainy morning tea, and walks during breaks. On her left wrist, she too wore a plain black band. For her, it wasn't fashion—it was comfort, like carrying a piece of her own strength every day.

Though they worked in the same building, Amar and Rama had never spoken. The floor had two lifts—Amar always took one, and Rama the other. Without realizing it, their lives followed the same timing. They entered the building at the same hour, parked their vehicles side by side, grabbed coffee from the same vending machine around 10:30, and even left work at nearly the same time. Yet, they had never noticed each other.

One day, it rained heavily. Both arrived at the same time, soaked and dripping. Rama was laughing with her colleague about her ruined umbrella. Amar, standing nearby, smiled slightly without even knowing why. Then came the moment everything changed. One of the lifts broke down. Amar had to use the other one—the one Rama used. That was the first time he noticed her clearly. She stood beside him, adjusting her bag, talking about street food with a friend. Her energy was different. She was alive in ways he had forgotten.

From then on, Amar began using the same lift every day. Slowly, he started talking to her. A few awkward hellos turned into casual chats. They became good friends. What surprised Amar the most was how light he felt when he was around her. She talked about small things, laughed at silly jokes, and never tried to impress anyone. She helped him see the beauty in everyday moments. Sometimes, when she tucked her hair back with her left hand, Amar's eyes would fall on the black band on her wrist. He never asked, but somehow, it felt familiar—like a reflection.

One evening, as the city lights sparkled, they sat on the terrace with coffee in their hands. Amar opened up about his love for painting—how he had stopped years ago, and how something about her made him want to start again. Rama's eyes lit up. She supported him instantly.

From that day, Rama helped Amar with painting. She brought him brushes, showed him photos for inspiration, and gave feedback on his work. They would sit together after work, painting side by side—he, learning again; she, encouraging quietly. His days, once dull, were now filled with color—both on canvas and in life.

But everything shifted the day Rama discovered who Amar really was. She had always thought he was just another employee in a nearby company. When she learned that he was the rich CEO of the floor's biggest firm—and from a powerful family—her heart sank. She felt small. Different. Out of place.

She began avoiding him.

.....TO BE CONTINUED

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