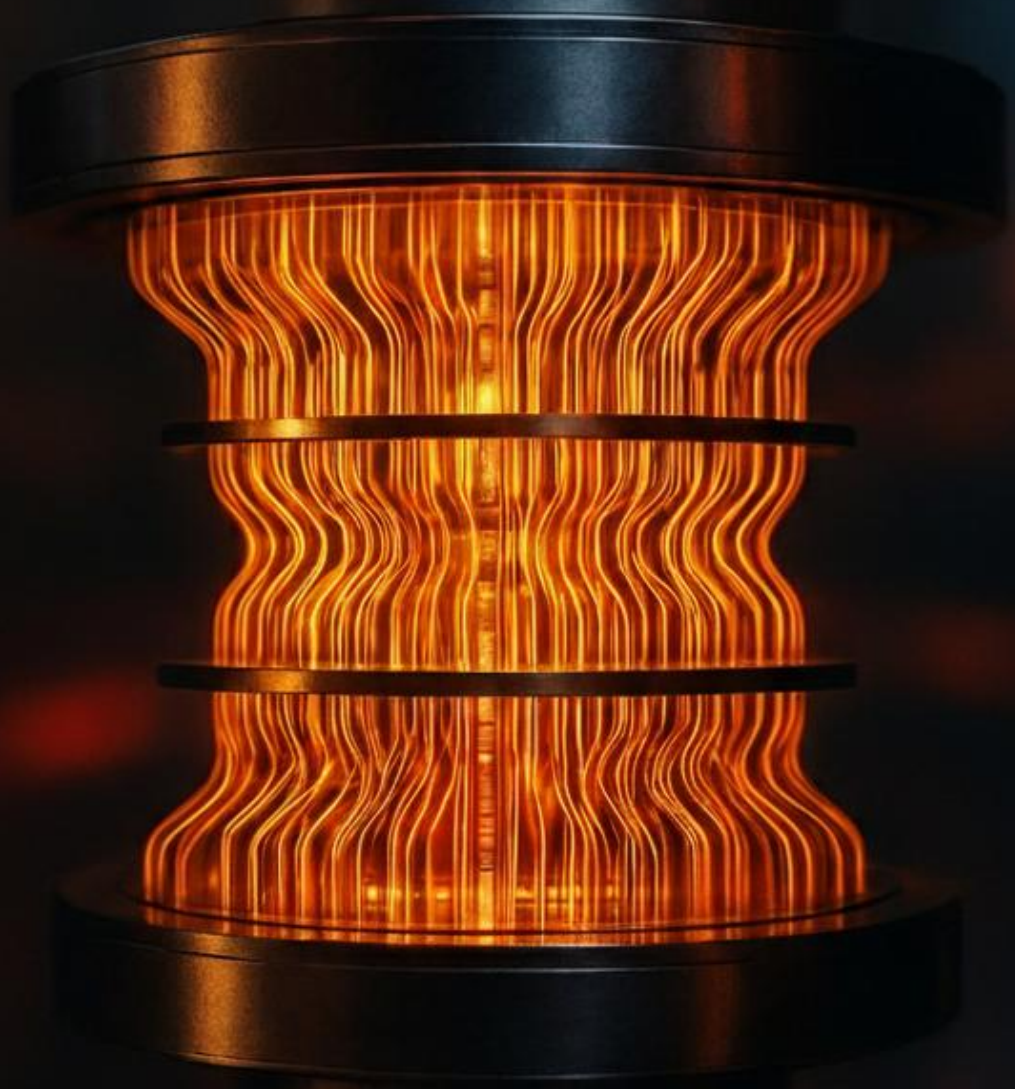
NEWSLETTER

DEPARTMENT OF
ELECTRICAL & ELECTRONICS ENGINEERING

Volume - X July – Sept., 2025 Issue - III



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR
COLLEGE OF ENGINEERING (AUTONOMOUS),
ANANTHAPURAMU – 515002,
ANDHRA PRADESH, INDIA

CONTENTS

About the Department

The Department of Electrical Engineering was established in 1946 offering B.Tech course (Electrical and Electronics Engineering) with an intake of 30 students, which was enhanced to 50 in the year 1995 and subsequently to 60 in the year 2009. In 1946 the college was established at Guindy, Chennai and was shifted to Anantapur in 1948. The Electrical Engineering Department offers various M.Tech programs. M.Tech, with specialization in “Electrical Power Systems” was started in the year 1971 with an intake of 25. “Power and Industrial Drives” was started in the year 2001 with an intake of 25. “Control Systems” started in the year 2001 with an intake of 25 and “Reliability Engineering” started in the year 2009 which is an interdisciplinary area with an intake of 18. The Department is having research facilities for Ph.D Programme in Electrical Engineering Discipline.

Institutional Vision

- Committed to expanding the horizon and inspiring young minds towards academic excellence.
- Aims at scaling new heights through advanced research and innovative techniques to keep pace with the ever-changing needs of industry and society at large.

Institutional Mission

- To identify and implement, proven, prevention-oriented, forward-looking solutions to critical, scientific and technological problems.
- To make technology a principal instrument of economic development of the country and to improve the quality of life of the people through technological education, innovation, research, training and consultancy.

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PROGRAM OUTCOMES

PO 1: 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.

PO 2: Problem Analysis: Identify, formulate, review research literature and analyze complex engineering problems reaching substantiated conclusions with consideration for sustainable development.

PO 3: 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.

PO 4: 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.

PO 5: 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.

PO 6: 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.

PO 7: Ethics: Apply ethical principles and commit to professional ethics, human values, diversity and inclusion; adhere to national & international laws.

PO 8: Individual and Collaborative Team work: Function effectively as an individual, and as a member or leader in diverse/multi-disciplinary teams.

PO 9: 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.

PO 10: 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.

PO 11: 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.

PROGRAM EDUCATIONAL OBJECTIVES

PEO 1: To excel in professional career and/or higher education by acquiring knowledge in mathematics and Basic sciences, Basic Electrical Sciences, Power Systems, Power Electronics and Electrical Drives.

PEO 2: To identify the problems in society and design electrical systems appropriate to its solutions using latest technologies that are technically sound, economically feasible and socially acceptable.

PEO 3: To exhibit professionalism, ethical attitude, communication skills, team work in their profession and adapt to current trends in technology by engaging in continuous professional development.

PROGRAM SPECIFIC OUTCOMES

PSO 1: The student can apply fundamental knowledge gained during the various courses of the program to analyse and solve the complex problems of Electrical Machines, Control Systems, Instrumentation System, Power Systems and Power Electronic systems.

PSO 2: The student can design electrical, electronics and allied interdisciplinary projects to meet the demands of industry and to provide solutions to the current real time problems.

PSO 3: The student can utilize the knowledge regarding recent techniques and sustainable technologies for developing the projects related to Control Engineering, Smart Grid, Power Quality and Advanced Power System protection to engage in lifelong learning

Message from HoDs Desk

It is with great pride and enthusiasm that I extend my greetings through this quarterly newsletter of the Department of Electrical and Electronics Engineering. The newsletter serves as a mirror reflecting the dynamic and progressive activities of our department, and I am delighted to see the collective efforts of students and faculty members in achieving academic and professional excellence. Each issue captures the essence of our department's commitment to nurturing innovation, skill development, and a strong foundation in core engineering principles.

During the past quarter, our department has actively engaged in organizing various academic and co-curricular activities such as expert lectures, technical workshops, and industrial visits. These initiatives have not only broadened the knowledge base of our students but have also strengthened their readiness for real-world challenges. Faculty members have continued to excel in research and development, with notable publications and ongoing projects that contribute to the advancement of the electrical engineering domain.

As we move forward, I encourage all stakeholders—students, faculty, alumni, and industry partners—to stay connected and contribute towards the growth and excellence of our department. Let us continue to uphold the values of integrity, innovation, and inclusivity, and work together in shaping competent engineers who are well-prepared to meet the evolving demands of the industry and society.

Dr. M. Ramasekhara Reddy
Assistant Professor & HoD
Department of EEE
JNTUA CE Ananthapuramu

EVENTS IN THE DEPARTMENT

Community Outreach Program

on 19th July, 2025

The Department of Electrical and Electronics Engineering, JNTUA College of Engineering, Ananthapuramu successfully conducted a community outreach and service program on 19th July, 2025. The initiative aimed to instill social responsibility among students while engaging them in meaningful activities that benefit both the campus and the surrounding community. The event was planned and executed by the faculty and students of II, III, and IV B.Tech.

Objectives of the Program

- To promote social awareness among engineering students.
- To instill values of service, discipline, and empathy.
- To engage students in community development and outreach activities.
- To foster teamwork and leadership qualities in young engineers.

Faculty & Students Participating in Campus Cleanliness Drive

NSS Activity

Organized on 20-09-2025

The Dept, of Electrical and Electronics Engineering, JNTUA College of Engineering (Autonomous), Ananthapuramu organized a community service activity on 20th September 2025 with enthusiastic participation from students of II, III, and IV year B.Tech, along with faculty and staff members. The activity was designed to instill social responsibility among students and to contribute meaningfully towards community development and environmental sustainability.

The main activities of the day included a cleanliness drive, tree plantation, and an awareness campaign. Students, guided by staff members, actively participated in cleaning the surroundings within and around the campus, ensuring proper disposal of waste and promoting the message of cleanliness. Following this, a tree plantation program was conducted where a large number of saplings were planted in designated areas to promote greenery and environmental balance. Alongside these efforts, students also carried out an awareness campaign on environmental conservation, waste management, and the importance of sustainable living.

Faculty members and staff worked in close coordination with the students, setting an example of teamwork and community service. The active involvement of students from different years ensured a vibrant atmosphere of cooperation and mutual learning. The sense of discipline, responsibility, and dedication displayed by the participants was commendable.

The activity concluded with a reflection session where both students and staff shared their experiences. Many students expressed that the program gave them a deeper sense of purpose and motivation to continue participating in such initiatives. Staff members appreciated the efforts of the NSS volunteers and encouraged them to carry forward the spirit of service beyond the college environment.

In conclusion, the NSS activity conducted on 20th September 2025 was highly successful in achieving its objectives. It not only enhanced the students' understanding of social responsibility but also fostered unity, discipline, and commitment towards community development. The event served as a reminder that collective efforts, even in small ways, can lead to significant positive impacts on society.

Students and Faculty Participation in NSS Activity

Engineers' Day Celebration – 2025

Organized on 15-09-2025

The Department of Electrical and Electronics Engineering, JNTUA College of Engineering, Ananthapuramu, celebrated Engineers' Day on 15th September 2025 to commemorate the birth anniversary of the legendary engineer, Bharat Ratna Sir Mokshagundam Visvesvaraya. The event was marked by enthusiastic participation from faculty, students, and a large number of school children who were invited to visit the department laboratories.

As part of the celebration, the department welcomed several groups of school students from nearby institutions. The objective was to inspire young minds and create awareness about the role of engineers in nation-building. The school children were given a guided tour of the Electrical Machines Laboratory, Power Electronics Laboratory, Control Systems Laboratory, and Measurement & Instrumentation Laboratory.

Faculty members along with final-year students actively explained the functioning, applications, and significance of various laboratory equipment. Demonstrations were arranged to showcase how theoretical concepts are applied in practice through experiments. The visitors were particularly fascinated by experiments on motors, transformers, power converters, and oscilloscopes. Interactive sessions allowed the school children to ask questions, which were addressed with patience and enthusiasm by staff and students.

The event also included short talks by faculty members, emphasizing the importance of engineering education, innovation, and the contributions of Sir M. Visvesvaraya to modern India. Students of the department volunteered in coordinating the sessions, ensuring smooth conduct of the program. The visiting school children expressed excitement and curiosity, making the event lively and meaningful.

The Engineers' Day celebration on 15th September 2025 at the Department of Electrical and Electronics Engineering, JNTUA CEA, was a grand success. It not only paid tribute to one of India's greatest engineers but also served as an outreach initiative to inspire future generations. The active involvement of faculty, students, and staff, along with the enthusiastic response from school children, made the program memorable and impactful.

Demonstration of Laboratory Equipment to Visiting Students

Demonstration of Open Motor to Visiting Students

Demonstration of various Meters to Visiting Students

Demonstration of Research Equipment to Visiting Students

Guest Lecture's

"What Engineering Graduates must know – Modern Defence Technologies and Contemporary Defence Systems & Equipment – A Growth & Learning Perspective – Current & Futuristic Prospects and Placement"

organized on 19-07-2025

Resource Person:

Commander Prasad YUV, IN-Senior Veteran

Principal Strategic Defence Adviser

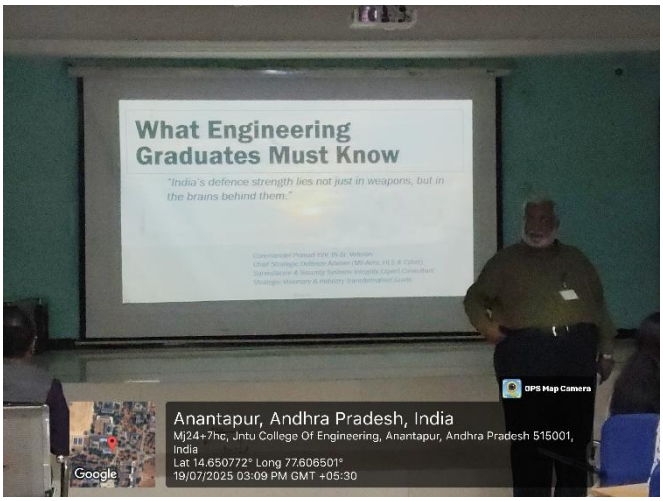
Graded Top Defence Technologist & Defence Columnist

Recipient of Best Citizen of India & Glory of India Awards

Listed member of International Society of Who's Who of Professionals

The Department of Electrical and Electronics Engineering, JNTUA College of Engineering, Ananthapuramu, organized an inspiring guest lecture on **19th July 2025** for III and IV B.Tech students. The session, titled **"What Engineering Graduates Must Know – Modern Defence Technologies and Contemporary Defence Systems & Equipment – A Growth & Learning Perspective – Current & Futuristic Prospects and Placement,"** was delivered by **Commander Prasad YUV, IN (Retd.)**, a Senior Veteran of the Indian Navy and renowned Defence Technologist. Commander Prasad, who is also a Principal Strategic Defence Adviser and recipient of prestigious awards like *Best Citizen of India* and *Glory of India*, shared his vast expertise with the students, shedding light on the critical role of engineers in the modern defence sector.

During the lecture, Commander Prasad offered valuable insights into contemporary defence systems, including advancements in unmanned vehicles, communication technologies, electronic warfare, and artificial intelligence in defence applications. He emphasized how Electrical and Electronics Engineering students can align their technical skills with defence requirements and encouraged them to explore career opportunities in organizations like DRDO, ISRO, BEL, and HAL. The session not only broadened students' understanding of defence technologies but also motivated them to consider contributing to national security through innovation and engineering excellence. The department extends sincere thanks to Commander Prasad for his enlightening talk and for inspiring future engineers to pursue careers in the strategic and technological development of the nation.



Students attending a Guest Lecture in Seminar Hall, Electrical and Electronics Engg. Dept.

"Indian Navy as a Career"

organized on 19-07-2025

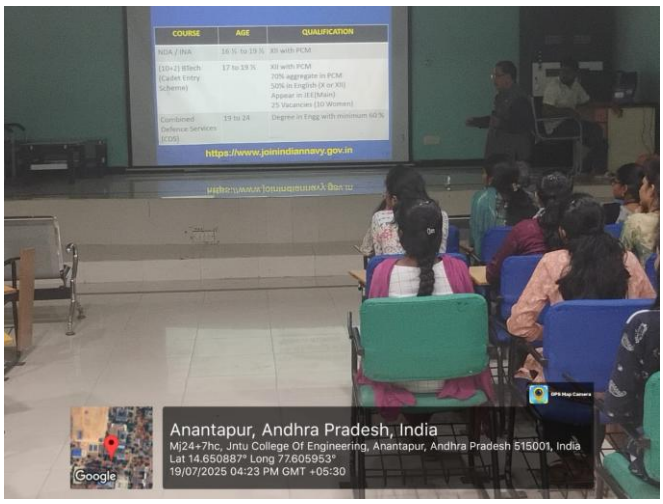
Resource Person:

Commander Gautam Negi (Retd)

Secretary

The Department of Electrical and Electronics Engineering, JNTUA College of Engineering, Ananthapuramu, organized an informative guest lecture on **19th July 2025** for III and IV B.Tech students. The session, titled **"Indian Navy as a Career,"** was delivered by **Commander Gautam Negi (Retd.)**, who currently serves as Secretary and is a distinguished veteran of the Indian Navy. With rich experience and deep knowledge of naval operations and defence services, Commander Negi shared valuable insights into the structure, life, and opportunities offered by the Indian Navy.

In his address, Commander Negi explained various technical and non-technical career paths available to engineering graduates in the Indian Navy, such as Executive, Engineering, and Electrical branches. He highlighted the eligibility criteria, selection procedures (including SSB interviews), training modules, and growth prospects within the Navy. The session also included an interactive Q&A where students enthusiastically participated. Commander Negi's inspiring words encouraged students to consider a career of honor, discipline, and service to the nation. The department extends its heartfelt gratitude to Commander Gautam Negi for his motivating session and guidance.



Students attending a Guest Lecture in Seminar Hall, Electrical and Electronics Engg. Dept.

"Career Planning and Overview of Super Critical Thermal Power Plants"

organized on 13-08-2025

Resource Person:

Mr. Udya Naik,
Head of Department – Electrical & HRM,
BHEL Yadadri Projects, Telangana,
Alumnus of JNTUA College of Engineering, Ananthapuramu

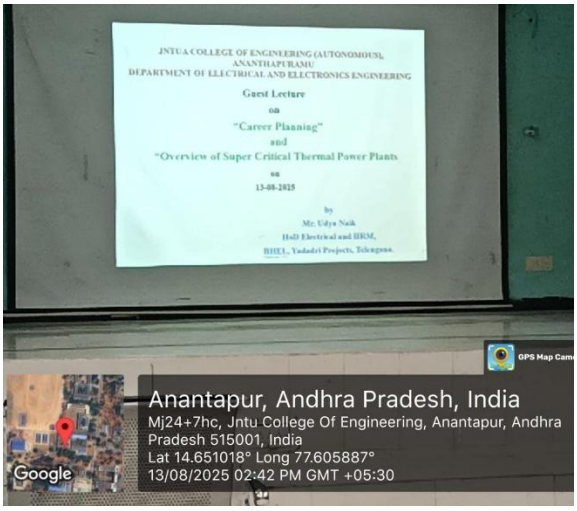
On 13th August 2025, the Department of Electrical and Electronics Engineering, JNTUA College of Engineering, Ananthapuramu, organized a guest lecture in the Seminar Hall on the topics "Career Planning" and "Overview of Super Critical Thermal Power Plants." The session was delivered by Mr. Udya Naik, Head of Department – Electrical and HRM, BHEL Yadadri Projects, Telangana, and a proud alumnus of the college. The objective of the lecture was to provide students with both professional career guidance and an in-depth understanding of advanced thermal power plant technologies.

In the first part of the lecture, Mr. Udya Naik emphasized the importance of career planning, setting achievable goals, and developing employability skills to succeed in competitive job markets. He discussed strategies for continuous learning, skill enhancement, and the balance between technical expertise and soft skills such as communication, teamwork, and leadership. The second part focused on the operational principles, design features, and advantages of super critical thermal power plants. He highlighted their higher efficiency, environmental benefits, and challenges in operation, supplemented with case studies from BHEL's Yadadri Projects.

The session was highly interactive, with students asking insightful questions on career development, industry trends, and the integration of modern power plant technologies with renewable energy systems. The lecture not only broadened students' technical knowledge but also motivated them to pursue careers in the core electrical sector with clear goals and determination. The Department of EEE expressed its gratitude to Mr. Udya Naik for his valuable time, guidance, and encouragement to the future engineers of the institution.

At the conclusion of the session, Mr. Udya Naik was felicitated by the Head of the Department of EEE with a shawl and a memento as a token of appreciation for his valuable contribution. The gesture reflected the department's gratitude for his insightful lecture and his continued association with his alma

mater. Faculty members and students warmly applauded, marking the event as both an enriching academic experience and a moment of pride for the institution.



Students attending a Guest Lecture in Seminar Hall, Electrical and Electronics Engg. Dept.

Seminar on "Virtual Lab"

Organized on 09-09-2025

The Department of Electrical and Electronics Engineering, JNTUA College of Engineering, Ananthapuramu, organized a seminar on Virtual Labs aimed at enhancing the practical understanding of students through modern digital platforms. The seminar was conducted for II-year students, with the active participation of faculty members and students.

The session was delivered by **Dr. V. Sankar**, Adjunct Professor, Department of EEE, JNTUA CE Ananthapuramu, who served as the resource person for the seminar. The seminar began with an introduction to the concept of virtual laboratories and their growing significance in engineering education. Dr. Sankar explained how virtual labs provide an interactive, safe, and cost-effective platform for students to perform experiments and strengthen their conceptual understanding.

During the seminar, students were guided through various simulation tools and online lab environments relevant to electrical and electronics engineering. The resource person demonstrated practical experiments that can be conducted virtually, highlighting the advantages such as real-time analysis, visualization of complex concepts, and flexibility in learning. The session also included interactive discussions where students asked questions regarding experiment procedures, virtual instrumentation, and applications of virtual labs in curriculum-based learning.

The seminar proved to be highly informative and engaging for the students. It provided them with insights into leveraging technology for practical learning, especially in situations where access to physical labs may be limited. Students gained knowledge on how virtual labs complement traditional hands-on experiments and enhance their overall understanding of theoretical concepts.

Overall, the seminar on Virtual Labs was a successful initiative by the Department of EEE. It encouraged students to explore modern learning tools, improved their practical skills, and emphasized the importance of integrating technology into engineering education. The department expresses its sincere gratitude to Dr. V. Sankar for his valuable guidance and informative session.

Dr. V. Sankar, Adjunct Professor, giving Seminar on Virtual Labs

Awareness on "Graduate Aptitude Test in Engineering (GATE)"

Organized on 25-09-2025

The Department of Electrical and Electronics Engineering, JNTUA College of Engineering, Ananthapuramu, organized an awareness program on 25th September 2025 for the benefit of UG III & IV year students and all PG students of various branches. The session was focused on the **Graduate Aptitude Test in Engineering (GATE) examination** and its significance in pursuing higher studies and research opportunities. The program was sponsored by the GATE-JAM Office, Indian Institute of Science (IISc), Bangalore.

The resource person for the session was **Sri. Chigicherla Venkata Sai Prasanna**, an alumnus of JNTUA CEA (2014–18 batch). He shared his valuable insights and personal experiences related to GATE preparation and success. He also highlighted the scope of pursuing higher education at prestigious institutes like IISc and IITs through GATE, as well as research and fellowship opportunities available through this examination.

The session aimed to introduce students to the wide range of academic and research opportunities available at IISc, Bangalore, and other reputed institutes. The speaker also emphasized the importance of early preparation, systematic study plans, and understanding the exam structure for achieving good scores in GATE. Furthermore, he provided information about the Joint Admission Test for Masters (JAM), helping students understand pathways to secure admission in postgraduate and doctoral programs.

The program concluded with an interactive Q&A session, where students actively participated and clarified their doubts. Overall, the awareness program proved to be highly informative and inspiring, motivating the students to prepare seriously for GATE and JAM to pursue higher academic goals and research careers.

గేట్ పరీక్షలపై అవగాహన

జేఎన్‌టీయూ, న్యూస్‌టుడే: గణితం, రసాయన, భౌతిక శాస్త్రాల్లో పట్టు సాధిస్తే గేట్ పరీక్షల్లో విజయం సాధించవచ్చని బెంగళూరులోని ఇండియన్ ఇన్‌స్టిట్యూట్ ఆఫ్ సైన్స్ రీసోర్స్ పర్సన్ ప్రసన్న పేర్కొన్నారు. జేఎన్‌టీయూలో విద్యార్థులకు గ్రాడ్యుయేట్ ఆప్టిట్యూడ్ టెస్ట్ ఇన్ ఇంజినీరింగ్ అనే అంశంపై సదస్సు నిర్వహించారు. గేట్‌లో అర్హత సాధిస్తే మాస్టర్‌డిగ్రీ చేయడానికి అర్హులవుతారన్నారు. దీంతోపాటు డాక్టరేట్ ఫెలోషిప్‌కు అవకాశం ఉంటుందన్నారు. ఐఐటీ, ఎన్ఐఐ, ఐఐఎస్‌సీలో ప్రవేశాలు పొందవచ్చని తెలియజేశారు. ఉద్యోగ అవకాశాలు కూడా లభిస్తాయన్నారు. విద్యార్థులు శ్రద్ధగా పరీక్షలకు సన్నద్ధం కావాలని సూచించారు. ప్రాంగణ నియామకాల అధికారి శ్రీనివాసులు పాల్గొన్నారు.

ఇండియన్ ఇన్‌స్టిట్యూట్ ఆఫ్ సైన్స్ ప్రతినిధి ప్రసన్నను సన్మానిస్తున్న జేఎన్‌టీయూ అధికారులు

“Felicitation of resource person Sri. Chigicherla Venkata Sai Prasanna, during the GATE Awareness Program sponsored by GATE-JAM Office, IISc Bangalore.” (News Paper Cutting)

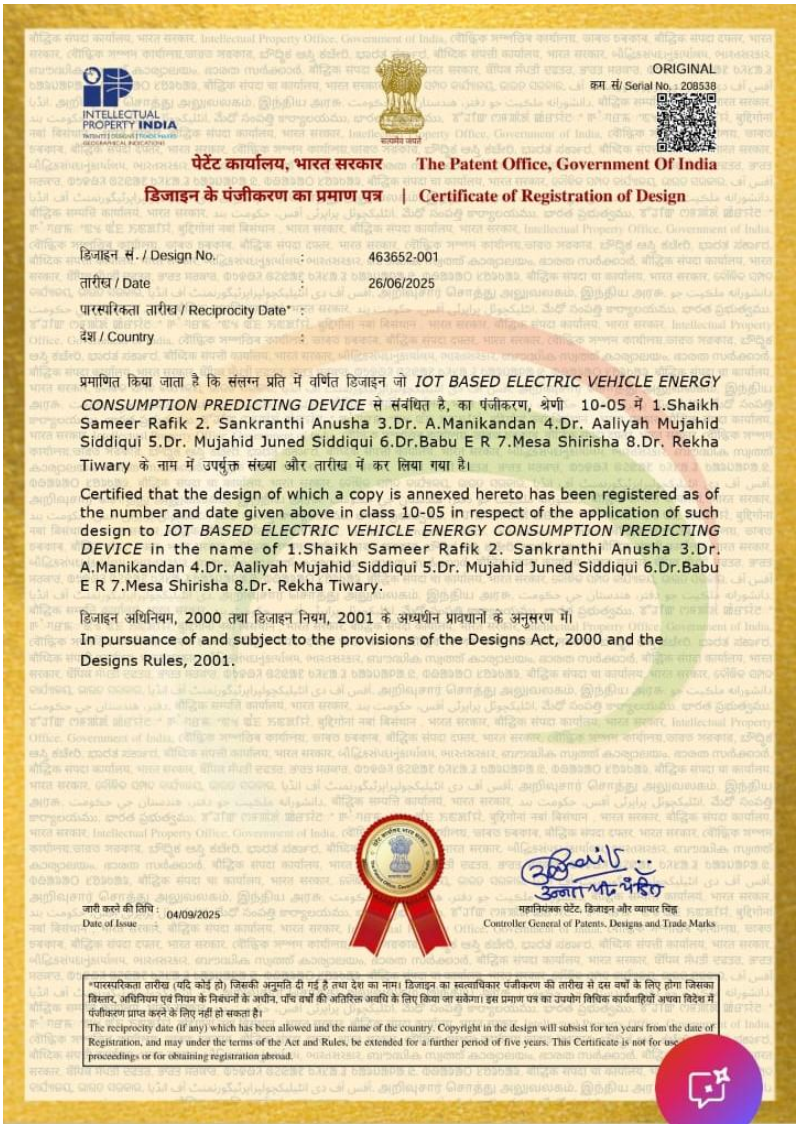
FACULTY ACTIVITIES

FACULTY ACTIVITIES

Patent:

We are delighted to announce that **Ms. S. Anusha** and **Ms. M. Shirisha** have been granted a Design Patent for their innovative project titled ***"IoT-Based Electric Vehicle Energy Consumption Predicting Device."***

This remarkable achievement highlights their creativity and technical excellence in the field of electric vehicles and IoT integration. The patented device focuses on predicting and optimizing energy consumption in electric vehicles, thereby contributing to the advancement of sustainable mobility solutions.



ORIGINAL
क्रम सं/ Serial No. : 208538

INTELLECTUAL PROPERTY INDIA

पेटेंट कार्यालय, भारत सरकार The Patent Office, Government Of India

डिजाइन के पंजीकरण का प्रमाण पत्र | Certificate of Registration of Design

डिजाइन सं. / Design No. : 463652-001

तारीख / Date : 26/06/2025

पारस्परिकता तारीख / Reciprocity Date* :

देश / Country :

प्रमाणित किया जाता है कि संलग्न प्रति में वर्णित डिजाइन जो *IOT BASED ELECTRIC VEHICLE ENERGY CONSUMPTION PREDICTING DEVICE* से संबंधित है, का पंजीकरण, श्रेणी 10-05 में 1.Shaikh Sameer Rafik 2. Sankranthi Anusha 3.Dr. A.Manikandan 4.Dr. Aaliyah Mujahid Siddiqui 5.Dr. Mujahid Juned Siddiqui 6.Dr.Babu E R 7.Mesa Shirisha 8.Dr. Rekha Tiwary के नाम में उपर्युक्त संख्या और तारीख में कर लिया गया है।

Certified that the design of which a copy is annexed hereto has been registered as of the number and date given above in class 10-05 in respect of the application of such design to *IOT BASED ELECTRIC VEHICLE ENERGY CONSUMPTION PREDICTING DEVICE* in the name of 1.Shaikh Sameer Rafik 2. Sankranthi Anusha 3.Dr. A.Manikandan 4.Dr. Aaliyah Mujahid Siddiqui 5.Dr. Mujahid Juned Siddiqui 6.Dr.Babu E R 7.Mesa Shirisha 8.Dr. Rekha Tiwary.

डिजाइन अधिनियम, 2000 तथा डिजाइन नियम, 2001 के अध्यधीन प्रावधानों के अनुसरण में।
In pursuance of and subject to the provisions of the Designs Act, 2000 and the Designs Rules, 2001.

जारी करने की तिथि : 04/09/2025
Date of Issue

महानियंत्रक पेटेंट, डिजाइन और व्यापार चिह्न
Controller General of Patents, Designs and Trade Marks

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The reciprocity date (if any) which has been allowed and the name of the country. Copyright in the design will subsist for ten years from the date of Registration, and may under the terms of the Act and Rules, be extended for a further period of five years. This Certificate is not for use in proceedings or for obtaining registration abroad.

Certificate of Patent

Conferences/Workshops / FDP's Attended:

- **Dr. M. Rathaiah** has participated in a One Week Faculty Development Program on **"Recent Advancements in Artificial Intelligence (AI) & ML"** organized by the Department of Electronics and Communication Engineering, St. Joseph's College of Engineering (Autonomous), Chennai, from 30th June to 4th July, 2025.
- **Smt. Y. Manasa** has participated in a One Week Faculty Development Program on **"Recent Advancements in Artificial Intelligence (AI) & ML"** organized by the Department of Electronics and Communication Engineering, St. Joseph's College of Engineering (Autonomous), Chennai, from 30th June to 4th July, 2025.
- **Mr. P. Rizwan** has participated in a One Week Faculty Development Program on **"Recent Advancements in Artificial Intelligence (AI) & ML"** organized by the Department of Electronics and Communication Engineering, St. Joseph's College of Engineering (Autonomous), Chennai, from 30th June to 4th July, 2025.
- **Mr. P. Rizwan** has participated in a Workshop on **"Academic Excellence Through NAAC Accreditation"** organized by the Internal Quality Assurance Cell (IQAC), JNTUA, Ananthapuramu, on 3rd July, 2025.
- **Smt. M. Nagachaitra** has participated in a One Week Faculty Development Program on **"Recent Advancements in Artificial Intelligence (AI) & ML"** organized by the Department of Electronics and Communication Engineering, St. Joseph's College of Engineering (Autonomous), Chennai, from 30th June to 4th July, 2025.
- **Smt. M. Shirisha** has participated in a One Week Faculty Development Program on **"Recent Advancements in Artificial Intelligence (AI) & ML"** organized by the Department of Electronics and Communication Engineering, St. Joseph's College of Engineering (Autonomous), Chennai, from 30th June to 4th July, 2025.
- **Dr. K. Bhart Kumar** has participated in a 20 Days Faculty Development Program on **"QT00 and QT-001 Foundations of Quantum Computing and Applications"** organized by the E&ICT Academy, MNIT Jaipur, and APSC HE, from 18th August to 11th Sept., 2025.
- **Mr. K. Nagabhushanam** has participated in a 20 Days Faculty Development Program on **"QT00 and QT-001 Foundations of Quantum Computing and Applications"** organized by the E&ICT Academy, MNIT Jaipur, and APSC HE, from 18th August to 11th Sept., 2025.
- **Smt. S. Anusha** has participated in a 20 Days Faculty Development Program on **"QT00 and QT-001 Foundations of Quantum Computing and Applications"** organized by the E&ICT Academy, MNIT Jaipur, and APSC HE, from 18th August to 11th Sept., 2025.

STUDENT ACTIVITIES

Indian Society for Technical Education Andhra Pradesh Section

State Awards 2024

Pathan Fahad Ali (Admn. No.: 20001A0220), a student of B.Tech. Electrical and Electronics Engineering, JNTUA College of Engineering, Ananthapuramu, has been recognized with the prestigious award titled **"Best Electrical and Electronics Engineering Student"** under the Ashok Raju Siddharth Institutions State Award, sponsored by Siddharth Institute of Engineering & Technology (Autonomous), Puttur.

Pathan Fahad Ali receiving prestigious award from ISTE Andhra Pradesh Section

Prestigious Award and Certificate

INDIAN SOCIETY FOR TECHNICAL EDUCATION, A.P. SECTION
JNTUA, ANANTHAPURAMU – 515 002

Chairman ISTE - AP
Prof. G. Ranga Janardhana
Email: ranga.janardhna@gmail.com
Phone: +91-9440151031

Secretary-cum-Treasurer
Prof. B. Eswara Reddy
Email: secretaryisteap@gmail.com
Phone: +91-9866937766

Executive Council Members:
Prof. P. Ravindra Babu
Email: prbabu_1961@yahoo.co.in
Phone: +91-9441061772

Prof. Venkat K. S.
Email: drkvsau@yahoo.co.in
Phone: +91-9848063452

Dr. T. S. S. Balaji
Email: tssbalaji@yahoo.com
Phone: +91-9866552556

Mr. L. Siva Prasada Reddy
Email: spreddylingala@gmail.com
Phone: +91-9440531813

Dr. Syed Altaf Hussain
Email: rgmaltaf1@gmail.com
Phone: +91-9494738100

State Managing Committee Members:
Dr. K. Vijaya Bhaskar
Email: bhaskarvijayak@gmail.com
Phone: +91-7989610759

Dr. G. Nageswara Rao
Email: gnraoaitam@gmail.com
Phone: +91-9440758550

Dr. K. Delhi Babu
Email: kdb_babu@yahoo.com
Phone: +91-9989928608

Prof. J V N Raju
Email: jvnraju@gmail.com
Phone: +91-9848462026

Date: 22-06-2025

ISTE AP Section /**State Awards-2024**/Award Winners

To:
Pathan Fahad Ali, B.Tech, EEE,
JNTUA College of Engineering,
Ananthapuramu.

Dear Student,

Sub: - Ashok Raju Siddharth Institutions State Award for "**Best Electrical and Electronics Engineering Student-2024**" – reg.

Hearty Congratulations!

I have pleasure to inform you that the Management Committee, ISTE AP Section has recommended your name for the Ashok Raju Siddharth Institutions State Award for "**Best Electrical and Electronics Engineering Student-2024**" sponsored by Siddharth Institute of Engineering &Technology, Puttur. The Award consists of a Medallion and Certificate. The presentation of awards will be made during the ISTE Student Convention and Award Function on 13th & 14th August, 2025 at Madanapalle Institute of Technology & Science, Madanapalle. You are cordially invited to come to MITS, Madanapalle to receive the Award.

We further expect you to become a member of ISTE if you are not a member of the ISTE.

Yours Sincerely

Secretary
ISTE A.P. Section
Ananthapuramu

Copy to: The Chairman/ Correspondent/ Secretary,
Siddharth Institute of Engineering &Technology,
Narayanavanam Road, Near Tirupathi -Chennai Highway,
Siddharth Nagar, Puttur - 517583.

Letter from ISTE Andhra Pradesh Section

Industrial Visit to SHAR, Shriharikota

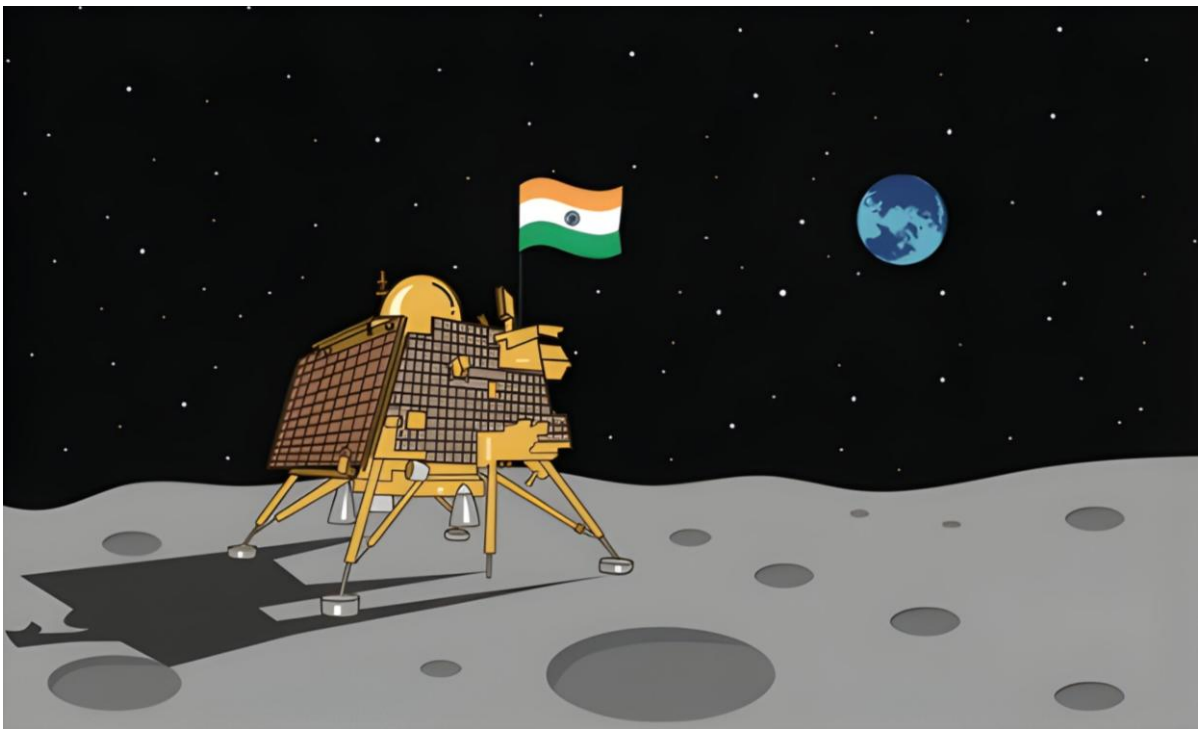
on 03-09-2025

The Department of Electrical and Electronics Engineering organized an industrial visit to the **Satish Dhawan Space Centre (SDSC-SHAR), Sriharikota,** on 3rd September 2025. A total of 53 students of IV B.Tech., have participated in the visit, accompanied by two faculty members, Mr. P. Rizwan, Assistant Professor (C) and Ms. Y. Manasa, Assistant Professor (C). The visit was aimed at providing students with practical exposure to India's space research activities, rocket launch facilities, and the application of engineering principles in large-scale national projects.

On arrival, the group was warmly received by the officials of SDSC-SHAR, who conducted an orientation session introducing ISRO's vision, achievements, and the significance of Sriharikota as India's spaceport. The students were briefed about various launch vehicles such as PSLV, GSLV, and LVM3, highlighting their payload capabilities and roles in different satellite missions. The visit included an insightful tour of important facilities, including the vehicle assembly building, launch pad areas, mission control centre, and the space museum. At the museum, students observed satellite models, rocket components, propulsion systems, and real hardware used in past missions, which gave them a clear understanding of India's progress in space technology.

The interaction with technical staff provided students with valuable insights into propulsion systems, cryogenic engines, telemetry, tracking, and mission control operations. This exposure helped students link their academic learning with practical applications, demonstrating how multiple disciplines such as electrical, electronics, mechanical, and computer engineering converge in space research. Faculty members encouraged students to ask questions, and the officials patiently clarified their queries, making the experience both educational and inspiring.

The visit proved to be a highly enriching learning experience. Students gained exposure to cutting-edge technologies, understood the importance of teamwork and precision in space missions, and were motivated to explore research and higher studies in advanced fields. They also realized the role of innovation and dedication in India's journey from launching small sounding rockets to achieving milestones in cryogenic propulsion and interplanetary missions.



In conclusion, the industrial visit to SDSC-SHAR, Sriharikota, on 3rd September 2025, was a memorable and valuable experience for the students as well as the faculty members. It not only bridged the gap between theory and practice but also instilled a sense of pride and inspiration among students. The Department expresses sincere gratitude to the authorities of SDSC-SHAR for their hospitality and guidance during the visit. Special appreciation is extended to Mr. P. Rizwan and Ms. Y. Manasa, who accompanied the students and ensured smooth coordination throughout the program.

Group Photograph at the Entrance of SDSC-SHAR, Sriharikota

Group Photograph at the Launch Pad

Exploring space technology – Satellite launch and tracking demonstration in the Control Room

Extracurricular Activities:

Patan Nafeeiya (Admission No.: 24001A0214), a proud NCC cadet with Regimental No. AP2024SWIA0350760, represented her institution at the prestigious **All India Thal Sainik Camp (AITSC)** held in Delhi. Demonstrating exceptional discipline, dedication, and leadership, she successfully completed an intensive 84-day training period. Her outstanding performance earned her a **Gold Medal in the Inter Group Competition (IGC)**, achieving top honors among participants from both Andhra Pradesh and Telangana. Her remarkable achievement brings great pride to the college and serves as an inspiration to fellow students.

Sl. No.: 335

NCC DIRECTORATE

ANDHRA PRADESH & TELANGANA
TSC-IGC 2025-2026
CERTIFICATE OF APPRECIATION

No. AP2024SWIA0350760 Rank CDT

Name PATAN NAFEEYA

Institution JNTUA COLLEGE OF ENGINEERING ANANTAPURAMU

Unit: 6(A) GILRS BN NCC, ANANTAPUR

Group: KURNOOL has actively participated in the

Inter Group Competition (IGC) - Thal Sainik Camp (TSC)

conducted from **07 July 2025** to **16 July 2025**, and has successfully competed in the following events:

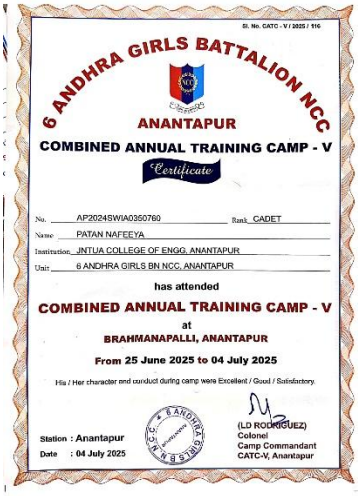
* **Tent Pitching**
* **Obstacle Training**
* **Judging Distance and Field Signals**
* **Map Reading**
* **Health and Hygiene**

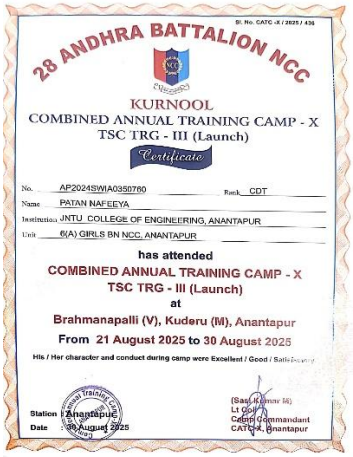
The cadet has displayed commendable enthusiasm, discipline, and dedication throughout the competition.

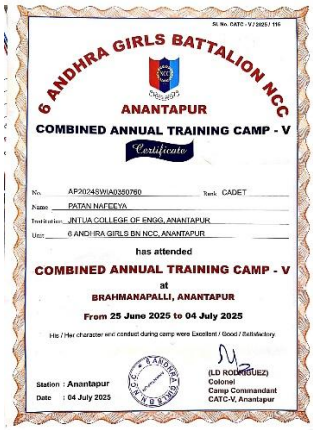
We appreciate the commitment and spirit of teamwork shown during the camp.

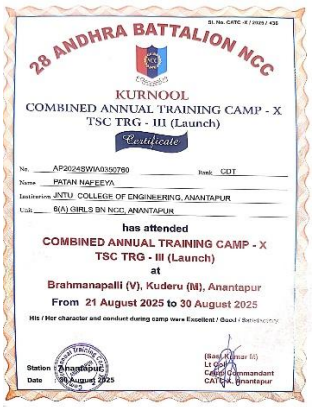
Date : 16 July 2025
Place : Anantapur

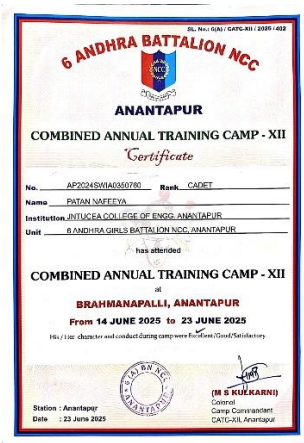
(Alok Tripathy)
Colonel
Group Commander
NCC Group HQ, Kurnool











NCC Certificate's of Patan Nafeeiya (Admission No.: 24001A0214)

Sergeant Mangala Babitha (Admn. No.: 24001A0244), a B.Tech. II Year student, actively participated in the Special National Integration Camp (NIC) organized by NCC DTE AP & T and conducted by NCC Group Kakinada from 24th September to 5th October 2025. Her NCC Registration Number is AP2024SWIA0350764. During the camp, she showcased exemplary discipline, leadership, and team spirit, representing her institution with pride. Her dedication and performance earned her the opportunity to give an interview to the *Eenadu* newspaper, where she shared her experiences and insights about the camp, reflecting her commitment to the ideals of the National Cadet Corps and national integration.

SPECIAL NATIONAL INTEGRATION CAMP

NCC DTE AP&T

This is to certify that No AP2024SWIA0350764 Rank Cdt

Name MANGALA BABITHA Unit 6(A) GIRLS BN KURNOOL

Dte AP & T has participated in Special National Integration Camp conducted by NCC Group Kakinada from 24 Sep 2025 to 05 Oct 2025

Place : Kakinada
Date : 05 Oct 2025

(Ritin Mohan Agarwal)
Col
Gp Cdr, NCC Gp HQ Kakinada

NCC Certificate

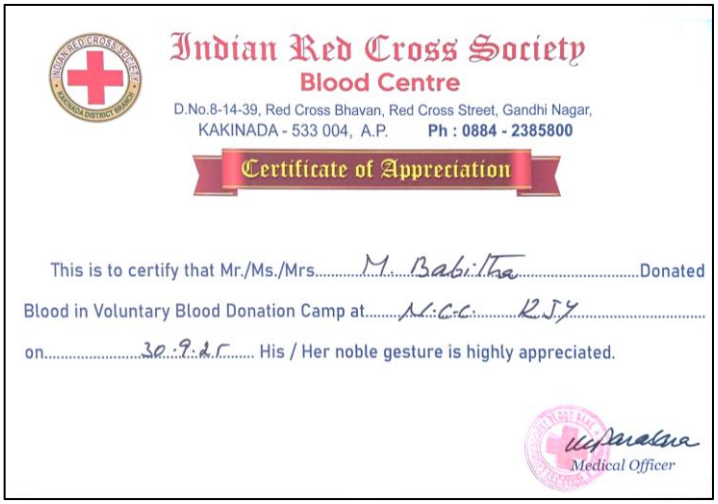
భలే ఆకట్టుకుంది..

శిబిరంలో భాగంగా మేము కాకినాడ సమీపంలోని కోరింగ వద్ద మడ అడవులను పరిశీలించాం. దేశంలోనే రెండో అతిపెద్ద మడ అడవులని చెప్పారు. నది, సముద్ర జలాల కలయిక ప్రాంతంలో ఇవి ఏర్పడ్డాయి. ఇక్కడ చెట్ల వేర్లు భూమిపైకి కనిపించడం భలేగా ఉంది.

- మంగళ బబిత

Newspaper Cutting

Sergeant Mangala Babitha (Admn. No.: 24001A0244), a B.Tech. II Year student, has donated blood at the Indian Red Cross Society Blood Centre during the NCC Blood Donation Camp held at Kakinada. Her participation in this noble cause reflects her compassion, sense of social responsibility, and dedication to serving humanity through the values instilled by the National Cadet Corps.



Indian Red Cross Society
Blood Centre
D.No.8-14-39, Red Cross Bhavan, Red Cross Street, Gandhi Nagar,
KAKINADA - 533 004, A.P. Ph : 0884 - 2385800

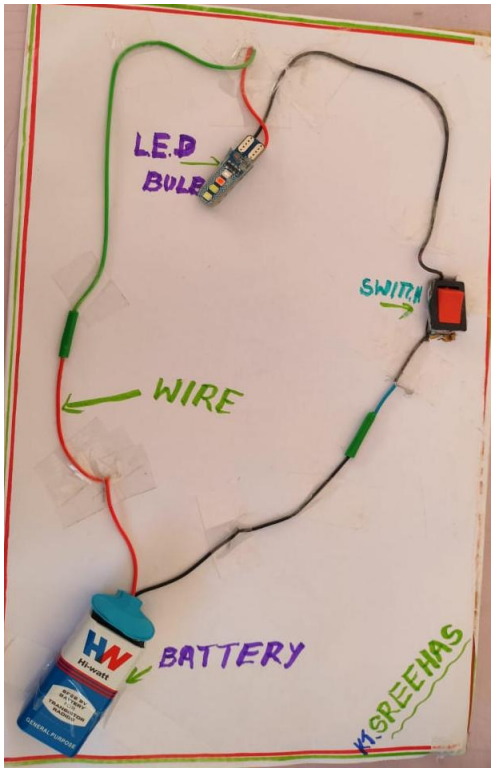
Certificate of Appreciation

This is to certify that Mr./Ms./Mrs. M. Babitha Donated Blood in Voluntary Blood Donation Camp at N.C.C. R.J.Y. on 30.9.25 His / Her noble gesture is highly appreciated.

Medical Officer

Certificate of Appreciation for Blood Donation

As part of the Engineers' Day celebrations, **K. Tarun Sreehas (Roll No: 24001A0218)** from the Department of Electrical and Electronics Engineering demonstrated a kit titled **"Glowing an LED Bulb Using a 9V Battery."** This involved a simple circuit consisting of a 9V battery, a current-limiting resistor, and an LED bulb to illustrate the basic principles of electrical circuits and Ohm's Law. By carefully selecting the resistor value, Tarun ensured the safe operation of the LED, demonstrating an understanding of voltage, current, and resistance relationships. His innovative effort reflected practical knowledge, creativity, and enthusiasm for core electrical concepts, adding value to the Engineers' Day event and inspiring his peers toward hands-on learning and experimentation.



"Glowing an LED Bulb Using a 9V Battery"

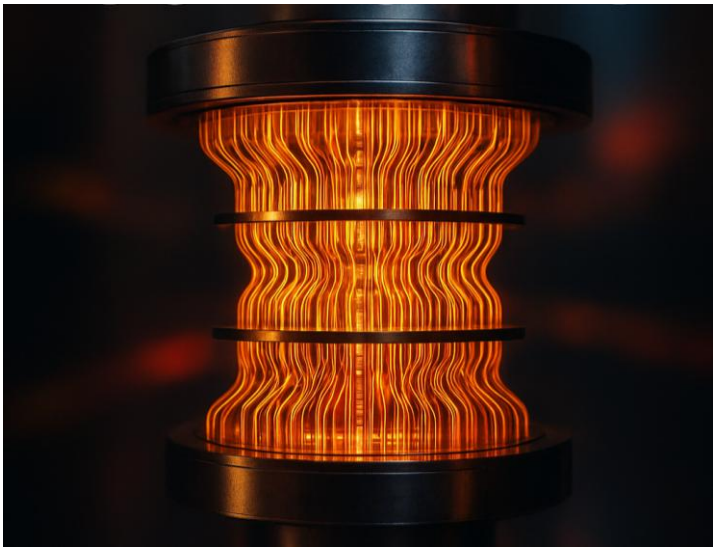
Ph.D.'s Awarded:

1. **Mr. Manne Praful Yadav (Admn. No.: 17PHr0201),** Electrical & Electronics Engineering, has defended his thesis on 07-08-2025 entitled **"Fault ride through capability enhancement of grid connected wind farm system employing intelligent controllers based DVR",** guided by Dr. P. Sujatha, Professor, Dept. of EEE.
2. **Mrs. L Jayavani (Admn. No.: 14PH0222),** Electrical & Electronics Engineering, has defended her thesis on 09-09-2025 entitled **"Control Techniques for Performance Enhancement in DC Microgrid"**, guided by Dr. K. Jithendra Gowd, Associate Professor, Dept. of EEE.

TECHNOLOGY

Quantum Computing

Quantum computing is a revolutionary approach to computation that leverages the principles of quantum mechanics—specifically superposition and entanglement—to process information in ways that classical computers cannot. Unlike traditional bits, which represent either 0 or 1, quantum bits (qubits) can exist in multiple states simultaneously. This capability allows quantum computers to perform complex calculations at speeds unattainable by classical systems. While still in the developmental phase, quantum computing holds the potential to transform various fields, including cryptography, materials science, and artificial intelligence.

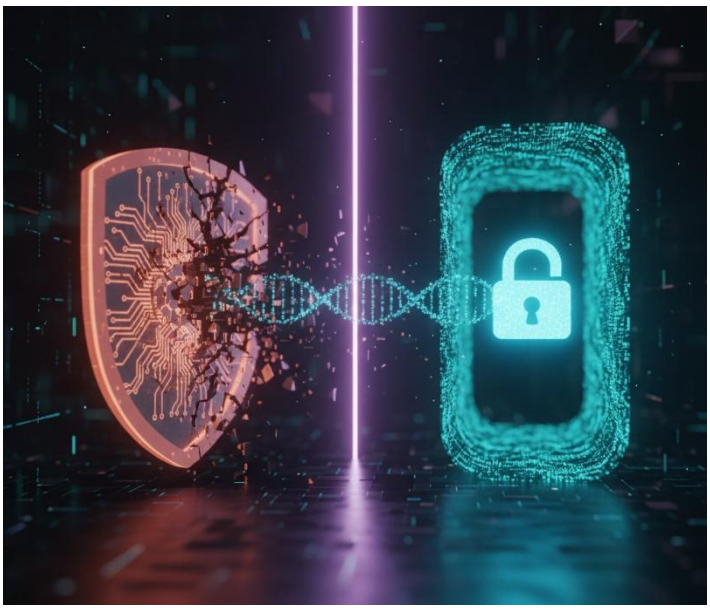


Importance of Quantum Computing

The significance of quantum computing lies in its ability to solve problems that are currently beyond the reach of classical computers. For instance, it can potentially revolutionize drug discovery by simulating molecular interactions at an unprecedented scale, leading to faster and more accurate identification of therapeutic compounds. In cryptography, quantum algorithms could break existing encryption methods, prompting the development of new, quantum-resistant security protocols. Additionally, quantum computing could enhance optimization problems in logistics, supply chains, and financial modeling, leading to more efficient and cost-effective solutions.

- **Healthcare and Medicine:** Quantum computers could accelerate drug discovery by simulating molecular interactions with unprecedented accuracy, leading to new treatments and personalized medicine. They could also optimize radiation therapy plans and improve diagnostic imaging.
- **Materials Science:** Designing new materials with specific properties (e.g., superconductors, catalysts) often requires complex simulations at the atomic level. Quantum computing can make these simulations feasible, leading to breakthroughs in energy, manufacturing, and electronics.

- **Financial Modeling:** Quantum algorithms could optimize complex financial models, improve risk assessment, detect fraud more effectively, and lead to more efficient trading strategies.
- **Artificial Intelligence and Machine Learning:** Quantum machine learning algorithms have the potential to process vast datasets more efficiently, enhancing AI capabilities in areas like pattern recognition, natural language processing, and optimization problems.
- **Cybersecurity:** While quantum computing poses a threat to current encryption methods (e.g., Shor's algorithm can break RSA encryption), it also offers solutions. Quantum cryptography promises fundamentally secure communication methods that are immune to classical attacks.



Andhra Pradesh's Quantum Computing Initiative

Andhra Pradesh is positioning itself as a leader in India's quantum computing landscape through the establishment of the Amaravati Quantum Valley. This ambitious project aims to create a comprehensive ecosystem for quantum research and development. The state government has partnered with global tech giants like IBM and Tata Consultancy Services (TCS) to set up India's largest quantum computer, featuring a 156-qubit IBM Quantum System Two processor TCS. The initiative is expected to generate over 100,000 jobs by 2026, fostering innovation and attracting significant investments Quantum Zeitgeist.

In addition to the quantum computer, the Amaravati Quantum Valley will house India's first Quantum Reference Facility, with an investment of ₹40 crore. This facility will focus on the testing, benchmarking, and characterization of quantum components, aiming to reduce reliance on imported technologies and support domestic manufacturing in line with the National Quantum Mission The Quantum Insider.

Further strengthening this initiative, the Andhra Pradesh government has approved the establishment of the Quantum Computing Centre (AQCC), which will serve as a hub for cutting-edge

research and development. The AQCC will offer services to universities, startups, industries, and research institutions across various sectors, facilitating collaboration and innovation in quantum technologies The New Indian Express.

Strategic Collaborations and Investments

The success of the Amaravati Quantum Valley is underpinned by strategic collaborations between the Andhra Pradesh government, academic institutions, and industry leaders. Partnerships with institutions like IIT Madras and companies such as IBM and TCS are central to the development of quantum algorithms and applications. These collaborations aim to address complex challenges in sectors like life sciences, materials science, supply chain resilience, energy optimization, cryptography, and sustainable manufacturing TCS.

The state government has also set an ambitious goal of attracting USD 1 billion in investments by 2029 to support the growth of the quantum ecosystem. This includes the creation of a Living Lab with India's largest open quantum testbed, fostering innovation and talent development in the field The Economic Times.

Broader Implications for India and the World

Andhra Pradesh's quantum computing initiative aligns with India's National Quantum Mission, a ₹6,000 crore project aimed at advancing quantum technologies in computing, communications, sensing, and materials research. By establishing a robust quantum ecosystem, the state is contributing to India's goal of becoming a global leader in quantum technologies. The Amaravati Quantum Valley is poised to play a pivotal role in this transformation, positioning both the state and the country at the forefront of the quantum revolution.

Quantum computing represents a paradigm shift in the field of computation, offering solutions to complex problems that were previously considered intractable. Andhra Pradesh's proactive approach in establishing the Amaravati Quantum Valley underscores its commitment to leading in this transformative field. Through strategic partnerships, significant investments, and a focus on innovation, the state is laying the groundwork for a thriving quantum ecosystem that could have far-reaching implications for technology, economy, and society.

GALLERY


AND ON
SUNDA
WE
NO
California
Prosecco
MADE ME

EDITORIAL TEAM

Department of Electrical & Electronics Engineering
Jawaharlal Nehru Technological University Anantapur
College of Engineering, Ananthapuramu – 515 002,
Andhra Pradesh, India

www.jntuacea.ac.in