NEWSLETTER

DEPARTMENT OF
ELECTRICAL & ELECTRONICS ENGINEERING

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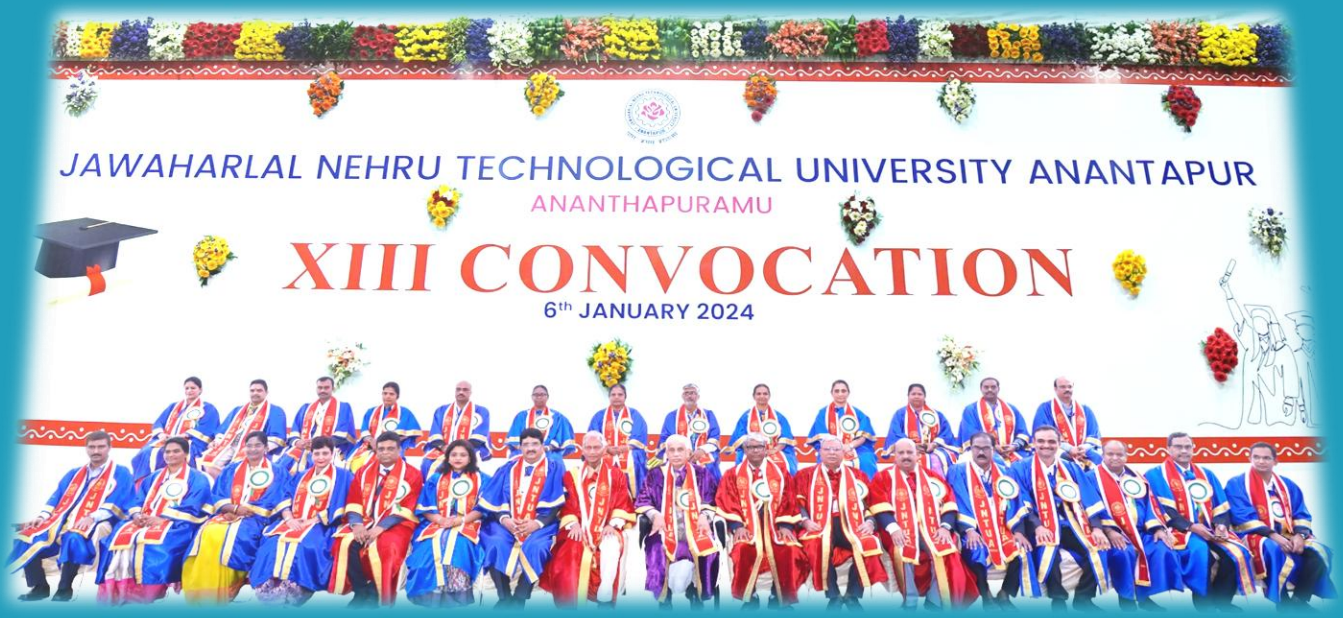

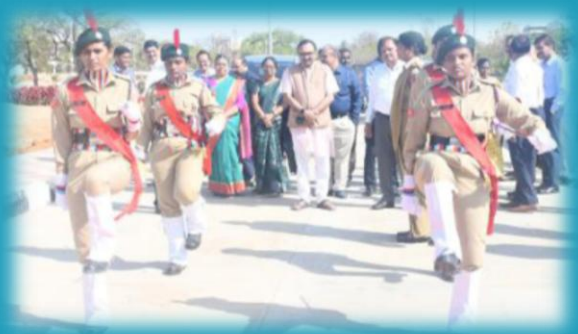

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR
COLLEGE OF ENGINEERING (AUTONOMOUS),
ANANTHAPURAMU – 515002,
ANDHRA PRADESH, INDIA

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 the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO 2: **Problem analysis**: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO 3: **Design/development of solutions**: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO 4: **Conduct investigations of complex problems**: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO 5: **Modern tool usage**: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO 6: **The engineer and society**: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO 7: **Environment and sustainability**: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO 8: **Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO 9: **Individual and team work**: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO 10: **Communication**: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO 11: **Project management and finance**: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO 12: **Life-long learning**: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning 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.

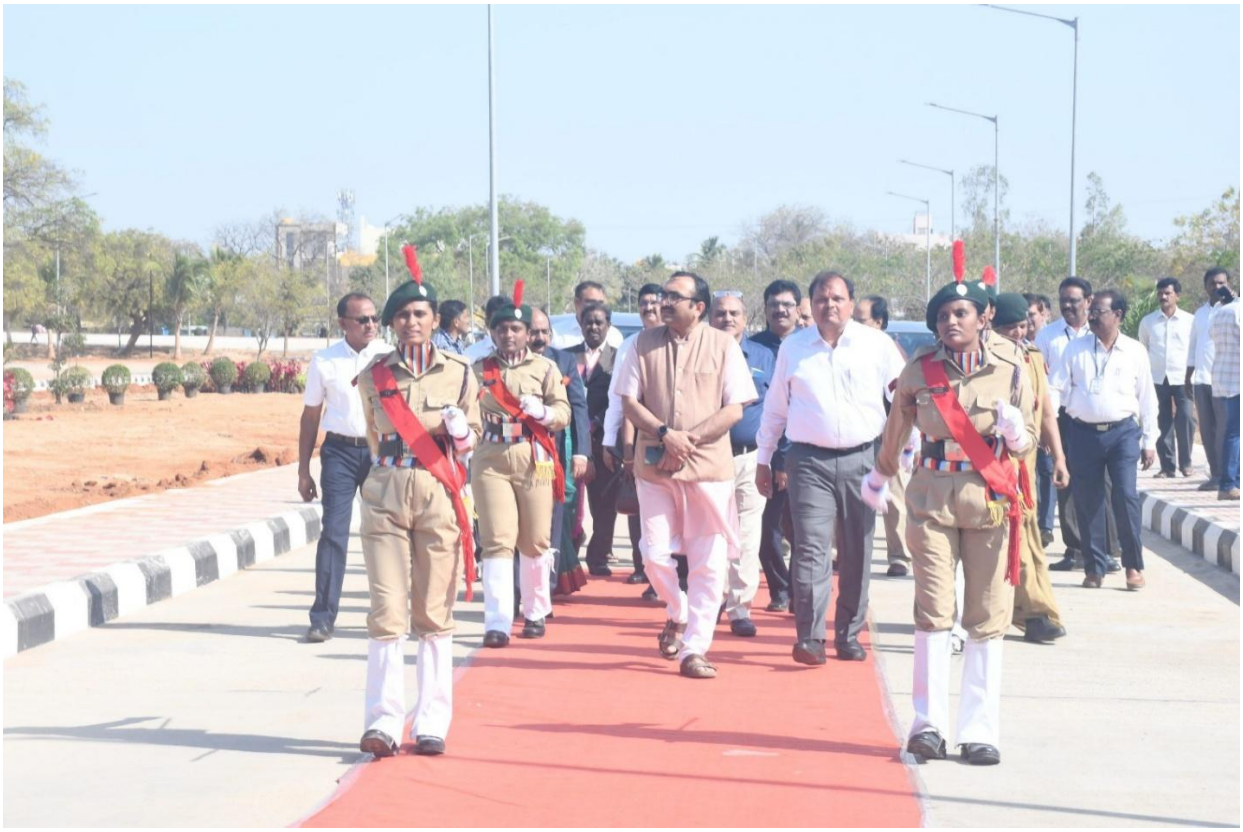
PSO 2: The student can design electrical, electronics and allied interdisciplinary projects to meet the demands of industry and to provide solutions to the current real time problems.

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

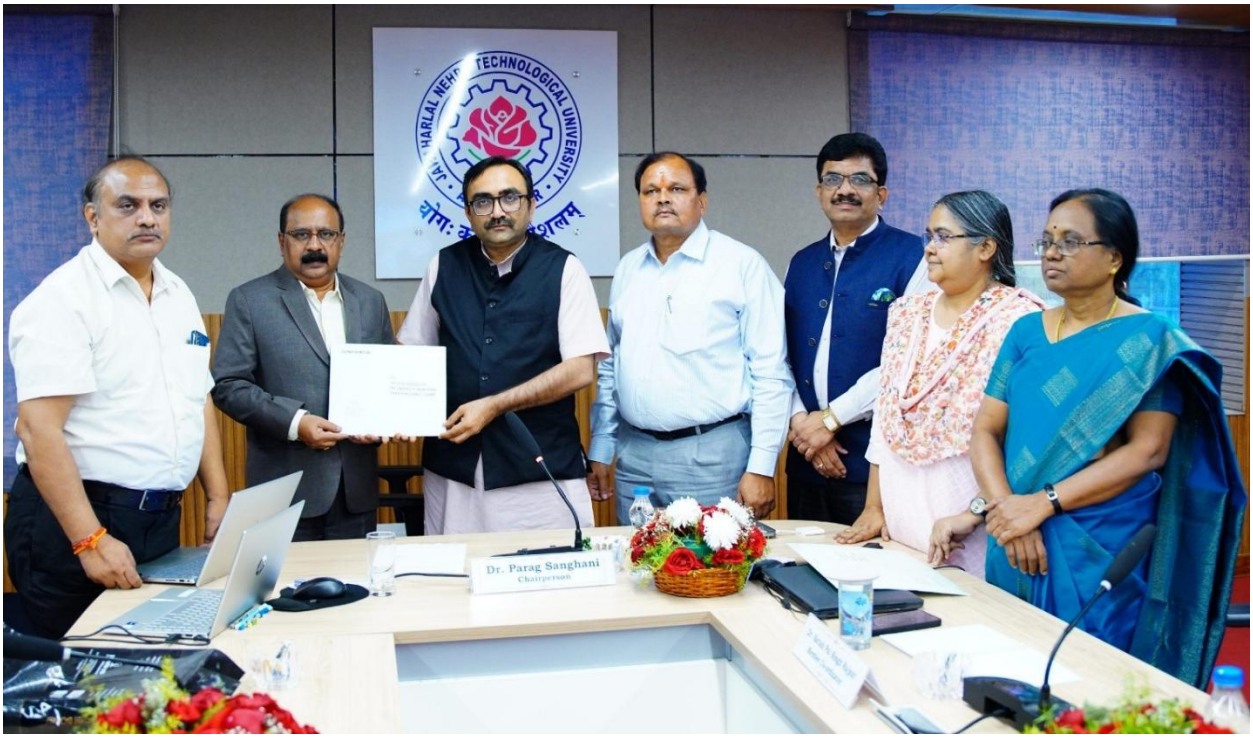
NAAC Team visit during 22-24 Feb., 2024.

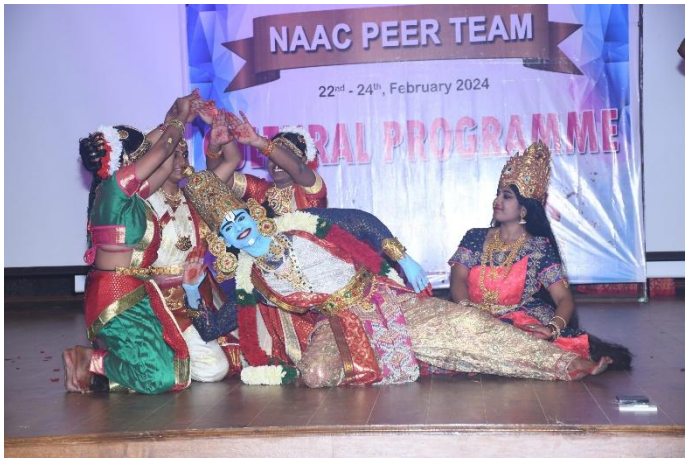
The National Assessment and Accreditation Council (NAAC) conducted a comprehensive evaluation visit to our institution from February 22 to 24, 2024. During this three-day assessment, the NAAC peer team meticulously reviewed various academic and administrative aspects, including curriculum, teaching-learning processes, research contributions, infrastructure, governance, and student support services. Faculty members, students, and staff actively participated in the interactions, showcasing the institution's commitment to quality education and continuous improvement. The visit also included an inspection of laboratories, libraries, and other facilities to ensure adherence to quality standards.

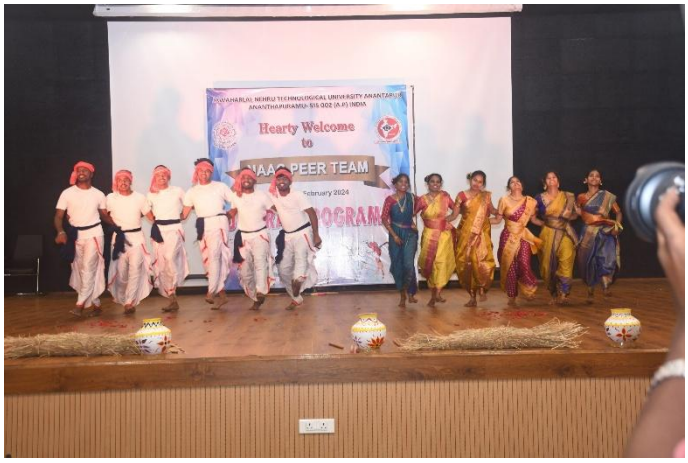
Following a thorough evaluation, our institution was honored with an 'A' grade accreditation, reflecting its excellence in academic and institutional performance. This recognition stands as a testament to the dedication and efforts of all stakeholders in upholding high standards in education, research, and administration. The NAAC accreditation will further enhance the institution's credibility and provide opportunities for growth, collaborations, and funding support. With this achievement, the institution remains committed to fostering innovation, student development, and overall educational excellence in the years to come.



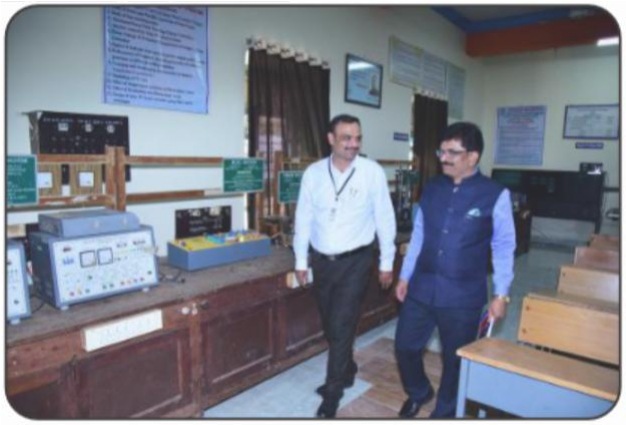
NAAC committee being escorted on a red carpet by NCC cadets







Cultural Events during NAAC Visit

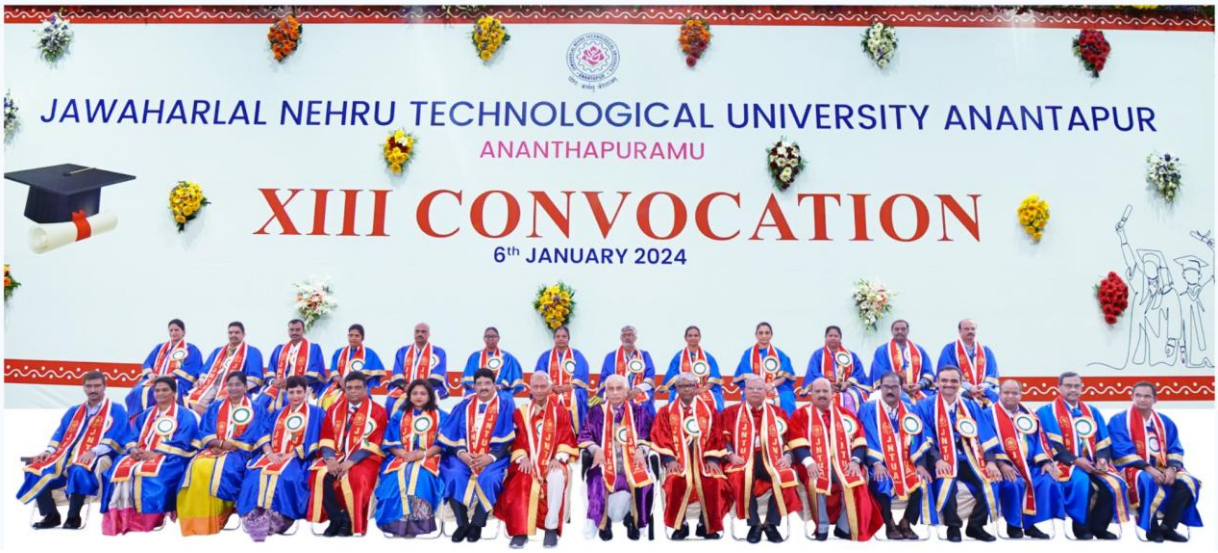


NAAC Committee Members visit to the Department

XIII CONVOCATION

on 6th January, 2024

Jawaharlal Nehru Technological University (JNTUA) Anantapur celebrated its XIII Convocation on **6 January 2024** (Saturday). About 86,142 students from 154 colleges were awarded bachelors, post graduate and doctorate degrees at the 13th Convocation held at the University's NTR Auditorium. Andhra Pradesh Governor Shri. Justice S Abdul Nazeer took part in the 13th Convocation of the JNTU. In his Convocation address Governor S. Abdul Nazeer observed that with more than 55,000 institutions, India's higher education system is one of the largest in the world. While address- ing the students at the 13th convocation of the Jawaharlal Nehru Technological University Anantapur (JNTUA), here on Saturday, he highlighted the significance of "The National Education Policy (NEP) 2020". Mr. Nazeer said. "As you step into the professional arena, remember that success is not defined by the accolades you accumulate or the positions you hold. True success lies in the impact you create, the problems you solve, and the lives you touch," the Governor said addressing the students. The Governor signed the convocation register approving the award of 86,142 degrees to the students pertaining to academic years 2021-22 & 2022-23.



Glimpses of the Audience @ XIII Convocation

Endowment Gold Medalists (B.Tech) for 2021-22

S.No	Gold Medal Category	Admission Number	Name of the Student	Percentage
1	Prof. S.Tiruvengalam Gold Medal to the topper of B.Tech (E.E.E).	18001A0211	Velpula Chaithanya	84.72

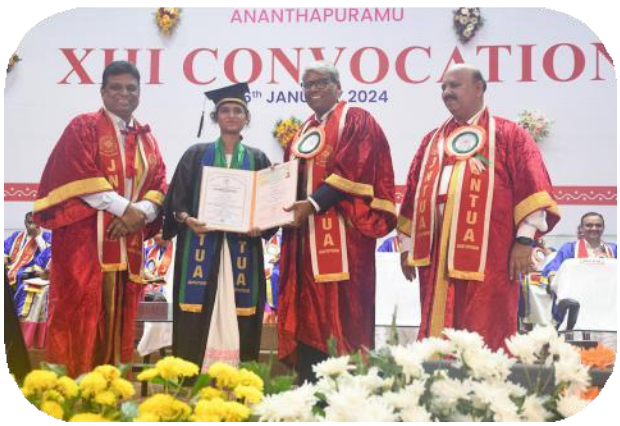
Mr. Velpula Chaithanya, H.T.No. 18001A0211, Electrical and Electronics Engineering with 84.72 %.

Endowment Gold Medalists (M.Tech) for 2021-22

S.No	Gold Medal Category	Admission Number	Name of the Student	Percentage
1	Prof. M. S. Naidu memorial Gold Medal to the best out going student of M.Tech. (Electrical Power Systems).	20001D2104	Tarugu Chandana	90.06%
2	Prof. S.Tiruvengalam Endowment Gold Medal to the best out going student of M.Tech. (Reliability Engineering).	20001D9104	Saraswathula Gayathri	81.5%

Endowment Gold Medalists (B.Tech) for 2022-23

S.No	Gold Medal Category	Admission Number	Name of the Student	Percentage
1	Prof. S.Tiruvengalam Gold Medal to the topper of B.Tech (E.E.E).	19001A0237	Madinepalli Nithya Sree	87.6



Ms. Madinepalli Nithya Sree, H.T.No. 19001A0237 Electrical and Electronics Engineering with 87.6 %.

FACULTY ACTIVITIES

Papers Published:

- T Lavanya, A Suresh Babu and **J Sreenivasulu**, **"Reliability Analysis of a System using Machine Learning Algorithms"**, Journal of Technology, Volume 12, Issue 3, pp. 376 – 390, 2024, DOI:18.15001/JOT.2024/V12I3.24.3114
- D Srinivas, **M Ramasekhara Reddy**, **"Optimal Planning of Electric Vehicle Charging Station in Radial Distribution Network along with Reconfiguration"**, 2023 International Conference on Power Energy, Environment & Intelligent Control, pp. 1039-1044, DOI: 10.1109/PEEIC59336.2023.10450857

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3. B. Chandrayudu
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