NEWSLETTER

DEPARTMENT OF

ELECTRICAL AND ELECTRONICS ENGINEERING

Volume - V July – Sept., 2021 Issue - III

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR
COLLEGE OF ENGINEERING, 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.

FACULTY ACTIVITIES

Papers Published:

- M Kumudwathi, G Sreenivasan and **R Kiranmayi, "Optimal Load Dispatching through Wind Energy and Solar Energy Systems",** Turkish Journal of Computer and Mathematics Education, Vol. 12, No. 14, July 2021.
- Venkatasupura Vemulapati, Y N Vijaykumar, **N Visali** and S Lakshmi Devi, **"Laboratory Prototype Model of a High-Speed Railway Supply System for Performance Enhancement with Multi Module Converter in Indian Railways",** International Conference on Smart Data Intelligence (ICSMDI 2021).

Workshops / FDP's Attended:

- **Sri P. Rizwan** has participated in 1-week National level FDP on **"Recent Trends in Electrical Engineering"**, held during 16th – 23rd Aug., 2021 organized by Dept. of EEE, Geethanjali Institute of Science and Technology, Nellore.
- **Sri P. Rizwan** has participated in 1 day workshop on **"Microgrids Operation Control and Protection under Smart Grid Environment"**, held on 14th Aug., 2021 organized by IIT Patna.
- **Sri P. Rizwan** has participated in 2 day FDP on **"Power System Design Simulation and Analysis using DIgSILENT Power Factory Software",** during 14th – 15th Sept. 2021 organized by DELLSOFT Technologies Pvt. Ltd., New Delhi.
- **Sri P. Rizwan** has participated in 1 day FDP on **"Microgrid System Design and Simulation using HOMER Pro and HOMER Grid Software",** on 16th Sept. 2021 organized by DELLSOFT Technologies Pvt. Ltd., New Delhi.

Awards:

- **Dr. P. Sujatha** received certificate of **"Commendation"** from District Administration, Anantapur on 15th Aug., 2021.
- **Dr. N. Visali** has been awarded with **"Women Researcher Award"** by International Scientist Awards on Engineering, Science and Medicine, Trivandrum, India held on 28th & 29th Aug., 2021.
- **Dr. J. Sreenivasulu,** has been awarded with **"Distinguished Teacher – 2021"** from I_2OR Organization.

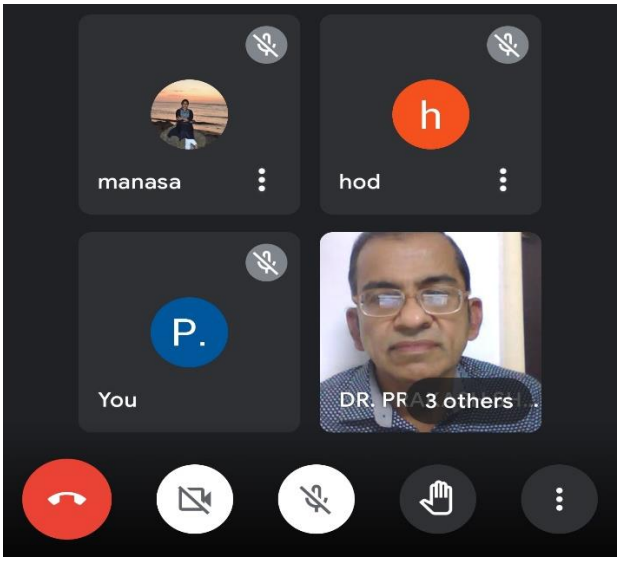
Others:

- **Prof. G. Ranga Janardhana,** Vice-Chancellor, JNTUA visited Department for inspection on 14th July 2021.

- Departmental BoS meeting held on 30th July 2021 for finalizing of tentative syllabus (3rd and 4th Year) for R19 regulation.

- A online BoS meeting was held on 13th Aug., 2021 for finalizing of syllabus (3rd and 4th Year) for R19 regulation. The following were the members for the BoS,

1. Dr. N. Visali, Professor and HoD, JNTUA CEA
2. Dr. M. Vijaya Kumar, Professor and Rector, JNTUA
3. Dr. P. Sujatha, Professor and Principal, JNTUA CEA
4. Dr. R. Kiranmayi, Professor and DFAAM, JNTUA
5. Dr. P. S. Kulkarni, Associate Professor, EE Dept., VNIT, Nagpur
6. Dr. G. N. Srinivas, Professor and Vice-Principal, EEE Dept., JNTUAH CEH
7. Dr. B. Ravikumar, Associate Professor, EE Dept., IITH, Hyderabad
8. Prof. C. Radha Krishna, Director, Global Energy Systems Pvt. Ltd., Hyderabad
9. Smt. C. N. Arpitha, Associate Professor, EEE Dept., KSRM College of Engineering, Kadapa



- Dr. P Sujatha, Principal let the flag hoisting ceremony on 15th August 2021, as India celebrated the country's 75th Independence Day in JNTUA College of Engineering, Ananthapuramu.

MoUs

- MoU has been taken between **JNTUA College of Engineering, Ananthapuramu** and **Southern Region Machinery Training and Testing Institute, Tractor Nagar, Garladinne, Anantapur** on 31st Aug. 2021. The Scope of the MoU is to provide Industrial Training & Visits for faculty and students, extend the support to deliver guest lecturers to the students, placement of trained students.

STUDENT ACTIVITIES

Others:

- A group photo session was arranged with outgoing batch of 2017-2021 on 3rd Aug., 2021.

Ph.D. DISSERTATION

S. No.	Name & Admn. No. of the Research Scholar	Title of the Research	Name of the Supervisor and Co-Supervisor	Viva-Voce held on
1.	Mr. M. Dilip Kumar 10Ph0208	Certain Investigations on Low Frequency Oscillations in Power Systems using Self Tuning and Facts Controllers	i. Dr. P. Sujatha ii. Dr. D. Thukaram	16.07.2021
2.	Mrs. N. Easwaramma 12Ph0211	Simulation of DVR with Intelligent Controllers for Power Quality Improvement	i. Dr. J. Praveen ii. Dr. M. Vijaya Kumar	18.08.2021
3.	Mr. A. Suresh Kumar 14Ph0217	Implementation of Certain Advanced SVPWM Strategies for Multi-Level Inverters	i. Dr. K. Sri Gowri ii. Dr. M. Vijaya Kumar	06.09.2021

EDITORIAL TEAM

1. T S Galeeb
2. O Nanda Kishore
3. B Vinod
4. Y Siva Sree
5. P Rachana

COMPILED BY

1. Sri. P. Rizwan, Asst. Professor (Contract)
2. Smt. Y. Manasa, Asst. Professor (Contract)

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