# NEWSLETTER

# DEPARTMENT OF

# **ELECTRICAL AND ELECTRONICS ENGINEERING**

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR COLLEGE OF ENGINEERING (AUTONOMOUS),

ANANTHAPURAMU – 515002,

ANDHRA PRADESH, INDIA

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### 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 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.

# **Department Vision**

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

# **Department Mission**

- To identify and implement, proven, prevention oriented, forward looking solutions to critical, scientific and technological problems in Electrical and Electronics Engineering.
- 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.

#### 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:

Venkatasupra Vemulapati, Yerram N Vijaykumar and Nagalamadaka Visali, "Performance Enhancement of a High-Speed Railway Supply System with Multi Module Converter: A Laboratory Prototype Model for Indian Railways", Indonesian Journal of Electrical Engineering and Computer Science, pp. 680-689, Vol. 25, No. 2, February 2022.

# **STUDENT ACTIVITIES**

#### **GATE Score:**

- Nikhil Talluri (Admn. No.: 19005A0201) bearing Registration No.: EE22S21103176 has secured a score of 267 in GATE 2022.
- Yogendra Muthyaboyina (Admn. No.: 19005A0221) bearing Registration No.: EE22S21101020 has secured a score of 321 in GATE 2022.
- Sarath Chandra Endla (Admn. No.: 19005A0206) bearing Registration No.: EE22S21101061 has secured a score of 328 in GATE 2022.
- Srisaicharan Achari Veeramalla (Admn. No.: 19005A0220) bearing Registration No.: EE22S21104069 has secured a score of 328 in GATE 2022.
- Vignesh Prasad Parvatham (Admn. No.: 18001A0214) bearing Registration No.: EE22S27117008 has secured a score of 357 in GATE 2022.
- B Rajith Bhargav Reddy bearing Registration No.: EE22S271104077 has secured a score of 360 in GATE 2022.
- Venkata Naga Sai Prathap Akkaraju (Admn. No.: 18001A0247) bearing Registration No.: EE22S21102015 has secured a score of 367 in GATE 2022.
- Obulesu Thumala bearing Registration No.: EE22S27112254 has secured a score of 503 in GATE 2022.
- Syed Shafiulla (Admn. No.: 18005A0207) bearing Registration No.: EE22S21106235 has secured a score of 514 in GATE 2022.
- Tailor Shaur Galeeb (Admn. No.: 17001A0233) bearing Registration No.: EE22S21106369 has secured a score of 514 in GATE 2022.
- P G Bhanuprakash Reddy bearing Registration No.: EC22S31102018 has secured a score of 525 in GATE 2022.
- Boya Vinod (Admn. No.: 17001A0253) bearing Registration No.: EE22S21101003 has secured a score of 593 in GATE 2022.

#### Department of EEE

- Chaithanya Velpula (Admn. No.: 18001A0211) bearing Registration No.: EE22S21102004 has secured a score of 660 in GATE 2022.
- Jayanth Kumar Reddy Palle bearing Registration No.: IN22S47113021 has secured a score of 854 in GATE 2022.

#### **Gold Medals:**

- Daggolu Supraja (Admn No.: 17001A0244) has received Gold Medal for the Best Academic Performance among Girls at twelfth Convocation 2022.
- Daggolu Supraja (Admn No.: 17001A0244) has received Prof. S. Tiruvengalam Endowment Gold Medal at twelfth Convocation 2022.
- Daggolu Supraja (Admn No.: 17001A0244) has received Challa Subbarayudu Endowment Gold Medal for the best outgoing student in all branches at twelfth Convocation 2022.
- Daggolu Supraja (Admn No.: 17001A0244) has received Prof. T. S. Raghavan Endowment Gold Medal for the best outgoing girl student in all branches at twelfth Convocation 2022.
- Daggolu Supraja (Admn No.: 17001A0244) has received Chundupalle Venkatarayulu and Sarojamma Endowment Gold Medal for the best outgoing girl student in all branches at twelfth Convocation 2022.
- Vadla Mounika (Admn No.: 19001D21112) has received Prof. M. S. Naidu memorial Endowment Gold Medal at twelfth Convocation 2022.

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.	Mrs. P Amrutha 13Ph0208	Power System Stabilization usingUPFCwithSupplementary Controllers	i. Dr. C. Srinivasa Rao i. Dr. M. Vijaya Kumar	11.02.2022
2.	Mr. K. Narasimhulu 13Ph0206	Identification of High Impedance Faults in Distribution System using AI Techniques	i. Dr. D. V. Ashok Kumar ii. Dr. M. Vijaya Kumar	26.02.2022

# **Ph.D. DISSERTATION**

# **EDITORIAL TEAM**

- 1. V Chaithanya
- 2. G S Nandhini
- 3. Venkata Suchi Manasa
- 4. B. K. Omkar Gowri
- 5. G Venkata Dinesh Reddy

# COMPILED BY

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



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