

MUFFAKHAM JAH

COLLEGE OF ENGINEERING AND TECHNOLOGY



Electrical Engineering Department

B.E. (Electrical and Electronics Engineering)

PROGRAM EDUCATIONAL OBJECTIVES

1. Graduates will demonstrate core competence and leadership in their chosen fields of employment by identifying, formulating, analyzing and implementing engineering solutions using current techniques and tools.
2. Graduates will communicate effectively as individuals or team members and be successful in local and global cross cultural working environment.
3. Graduates will demonstrate lifelong learning through continuing education and professional development.
4. Graduates will be successful in providing viable and sustainable solutions within societal, professional, environmental and ethical contexts.

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Electrical Engineering Department

VISION

To produce proficient engineers who illuminate the nation, drive the industry and innovate in the field of power and automation.

MISSION

Provide futuristic and comprehensive technical education to equip students with core competencies and relevant skill sets through effective teaching learning methods and state of art laboratories thus preparing them for global careers.

Pursue need based research and provide consultancy and testing services to address contemporary issues in the fields of electrical and instrumentation engineering.



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AND TECHNOLOGY

ELECTRICAL
ENGINEERING
DEPARTMENT
B.E. (ELECTRICAL AND
ELECTRONICS ENGINEERING)

PROGRAM SPECIFIC OUTCOMES

Graduates will be able to:

- PS01:** Apply Knowledge of power system configuration, electrical equipment and protection practices to the design and specification of electrical generation, transmission, distribution and utilization systems.
- PS02:** Design, analyze, test and evaluate the performance of the electrical machines and transformers.
- PS03:** Develop the expertise in the technology associated with efficient conversion and control of electrical power by static means from available form to the required form.

PROGRAM OUTCOMES

Graduates will be able to:

- PO1: ENGINEERING KNOWLEDGE** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- PO2: 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.
- PO3: 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.
- PO4: 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.
- PO5: 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.
- PO6: 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.
- PO7: 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.
- PO8: ETHICS** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- PO9: INDIVIDUAL AND TEAM WORK** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- PO10: 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.
- PO11: 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.
- PO12: 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.