

MUFFAKHAM JAH COLLEGE OF ENGINEERING AND TECHNOLOGY



Electronics and Communication Engineering Department
B.E. (Electronics and Communication Engineering)

PROGRAM EDUCATIONAL OBJECTIVES

1. Graduates will demonstrate technical competence in their chosen fields of employment by identifying, formulating, analyzing and providing engineering solutions using current techniques and tools.
2. Graduates will communicate effectively as individuals or team members and demonstrate leadership skills to be successful in the 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.

MUFFAKHAM JAH

COLLEGE OF ENGINEERING AND TECHNOLOGY



Electronics and Communication Engineering Department

VISION

To be recognized as a premier education center providing state of art education and facilitating research and innovation in the field of Electronics and Communication Engineering.

MISSION

We are dedicated to providing high quality holistic education in Electronics and Communication Engineering that prepares the students for successful pursuit of higher education and challenging careers in industry, R&D and academics.



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AND TECHNOLOGY

ELECTRONICS AND
COMMUNICATION
ENGINEERING
DEPARTMENT

B.E. (ELECTRONICS AND
COMMUNICATION ENGINEERING)

PROGRAM SPECIFIC OUTCOMES

The ECE graduates will:

- PS01:** Acquire state of art analysis and design skills in the areas of digital and analog VLSI Design using modern CAD tools.
- PS02:** Develop preliminary skills and capabilities necessary for embedded system design and demonstrate understanding of its societal impact.
- PS03:** Obtain the knowledge of the working principles of modern communication systems and be able to develop simulation models of components of a communication system.
- PS04:** Develop soft skills, aptitude and programming skills to be employable in IT sector.

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.