

#### MUFFAKHAM JAH COLLEGE OF ENGINEERING AND TECHNOLOGY



#### CIVIL ENGINEERING DEPARTMENT B.E. (CIVIL ENGINEERING)

#### PROGRAM EDUCATIONAL OBJECTIVES

- Graduates will demonstrate technical competence and leadership by analyzing, designing and executing Civil Engineering Structures using current techniques & tools.
- 2. Graduates will communicate effectively as individual or team members and be successful Civil Engineers in the local and global environment.
- Graduates will demonstrate lifelong learning through continuing education and professional development.
- and professional development.

  4. Graduates will be successful in providing viable and sustainable solutions.
  - within societal, professional, environmental and ethical context.





### **CIVIL ENGINEERING DEPARTMENT**

#### VISION

To produce technically competent and socially responsible civil engineers to propel infrastructural development.

## MISSION

To impart quality education and inculcate professional skills to function as proficient planners, designers and constructors capable of ensuring sustainability and safety.

#### PROGRAM OUTCOMES



# MUFFAKHAM JAH

AND TECHNOLOGY

#### CIVIL ENGINEERING DEPARTMENT

B.E. (CIVIL ENGINEERING)

PROGRAM SPECIFIC 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.

POS: DESIGN/IDEVELOPMENT 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 societies 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.

POS: 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.

POS: 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.

POSITIFIES Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

POSINDIVIDUAL AND TEAM WORK Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

POTE: 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.

POT: 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.

Graduates will be able to:

PS01: Function in construction industry for planning and execution of civil engineering projects like multistoried buildings, bridges and water retaining structures etc.

PSO2: Function as consultants for the design of infrastructural projects.