

# MUFFAKHAM JAH COLLEGE OF ENGINEERING AND TECHNOLOGY



## Mechanical Engineering Department B.E. (Mechanical Engineering)

### PROGRAM EDUCATIONAL OBJECTIVES

1. Graduates will be capable of demonstrating analytical and practical engineering skills using various techniques and tools in solving engineering problems.
2. Graduates will communicate efficiently as professional engineers in a team or as an individual in local and global cross cultural working scenario.
3. Graduates will demonstrate lifelong learning through higher education, skill improvement and professional development.
4. Graduates will be successful in devising sustainable solutions to environmental, socioeconomic and professional problems, with due regard to professional ethics.

# **MUFFAKHAM JAH**

## **COLLEGE OF ENGINEERING AND TECHNOLOGY**



### **Mechanical Engineering Department**

#### **VISION**

To produce high caliber,  
competent, industry  
oriented Mechanical  
Engineers.

#### **MISSION**

To impart quality education  
by providing state of the art  
technical facilities and  
enhance the professional  
abilities to meet the  
demands of the ever-  
changing manufacturing  
industry.



**MUFFAKHAM JAH**  
**COLLEGE OF ENGINEERING**  
**AND TECHNOLOGY**

**MECHANICAL**  
**ENGINEERING**  
**DEPARTMENT**  
**B.E.**  
**(MECHANICAL ENGINEERING)**

## 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.

## PROGRAM SPECIFIC OUTCOMES

Graduates will be able to:

- PS01:** Function in software industry in the areas of Design and development of software tools such as AUTO CAD, Solid works, Ansys etc.
- PS02:** Work in power plants and manufacturing industry in the sphere of operation and maintenance.