

### **The Programme Educational Objectives are described below**

- PEO1.To induce a sense of excitement in learning by adapting a holistic approach through well designed curriculum, pedagogy and evaluation for a successful professional career
- PEO2.To provide a strong foundation in physical sciences and analytics to enable comprehensive understanding of the basic principles of Mechanical Engineering
- PEO3.To develop knowledge and skill in applying engineering principles to conceive, design, analyze, manufacture, maintain and recycle engineering systems and components
- PEO4.To equip the students with essential fundamental knowledge not only in the facets of Mechanical Engineering but also from other relevant disciplines to infuse a multi-disciplinary approach
- PEO5.To enhance the spirit of inquiry through projects, internships leading to development of creativity, self confidence and team spirit
- PEO6.To provide necessary ambience with scope for developing communication and life skills so as to meet the needs of the society in the globalized environment

## **Mechanical Engineering Graduates will be able to**

- PO1. Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- PO2. 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 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. 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. 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. 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. Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- PO8. Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- PO9. Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- PO10. 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. 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. 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**

PSO1. Apply the principles of Engineering to Model, Analyze, Design and realize physical components, processes and systems

PSO2. Work professionally in Thermal or Mechanical systems