

## **Department of Mechanical Engineering Programme Specific Outcomes**

- PSO 1: To identify, formulate and evaluate multifaceted Engineering problems in Thermal Engineering, Design Engineering and Manufacturing Engineering domains.
- PSO 2: To make use of Mechanical Engineering software tools to solve realistic Industrial and Engineering problems.
- PSO 3: To develop collaborative learning to find out cost-effective, optimal solution sustainable growth.
- PSO 4: To develop managerial skills to work effectively in a team and in a society by following Ethical and Environmental practices.

### **Vision**

To produce Mechanical Engineers capable of solving research oriented and realistic industrial problems

### **Mission**

- Imparting knowledge in basic and applied areas of Mechanical Engineering
- Providing state of the art laboratories and research facilities
- Facilitating faculty development through continuous improvement programs

### **Programme outcomes**

- PO 1: Apply mathematics, science, engineering fundamentals and an engineering specialization to the conceptualization of engineering models
- PO 2: Identify, formulate, research literature and solve complex engineering problems reaching substantiated conclusions using first principles of mathematics and engineering sciences
- PO 3: Design solutions for complex engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations
- PO 4: Conduct investigations of complex problems including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions

- PO 5: Create, select and apply appropriate techniques, resources, and modern engineering tools, including prediction and modeling, to complex engineering activities, with an understanding of the limitations
- PO 6: Function effectively as an individual, and as a member or leader in diverse teams and in multi-disciplinary settings
- PO7: 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
- PO 8: Demonstrate understanding of the societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to engineering practice
- PO9: Understand and commit to professional ethics and responsibilities and norms of engineering practice
- PO 10: Understand the impact of engineering solutions in a societal context and demonstrate knowledge of and need for sustainable development
- PO 11: Demonstrate a knowledge and understanding of management and business practices, such as risk and change management, and understand their limitations
- PO 12: Recognize the need for, and have the ability to engage in independent and life-long learning
- PO 13: Demonstrate a knowledge and understanding of contemporary technologies, their applications and limitations, contemporary research in the broader context of relevant fields.
- PO 14: Demonstrate the ability to succeed in national and international competitive events in the relevant fields.