

# PG Program- Thermal Engineering

## *Program outcomes:*

- a. Students will proficiently use analytical or computational as well as software tools while attempting complex engineering problems to arrive at feasible solutions.
- b. Students will be able to comprehend modern research material and use it for deducing own inferences, solving complex engineering and societal problems.
- c. Students will be able to apply principles of Heat Transfer and Fluid Mechanics to design, evaluate and analyze performance of different heat exchangers by way of Mathematical Modeling Simulation.
- d. Students will be able to understand and interpret state-of-the-art research in Thermal, Fluid Power Systems & processes and will effectively apply the acquired knowledge in designing practical thermal systems.
- e. Students will demonstrate creative abilities to design new thermal and fluid products or to modify the design of existing products to satisfy the needs of diversified customers by precisely determining the specifications and constraints along with manufacturing processes, reliability and maintainability of the system.
- f. Students will be able to apply optimization techniques to model or modify the thermal design of new or existing products.
- g. Students will be able to comprehend different aspects of thermal design such as Computational Fluid Dynamics, Heat Transfer, Power Plant Engineering, Refrigeration & Air Conditioning System Design and Gas Turbines required in various fields such as aerospace, automotive and manufacturing to control the damage for enhancement of reliability as well as life of products.
- h. Students will be able to function as a member of a multidisciplinary team with a sense of ethics, integrity and social responsibility.