

## New Program Outcomes

**PO1: Engineering Knowledge:** Apply the knowledge of mathematics, natural science, computing, and engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

**PO2: Problem Analysis:** Identify, formulate, and analyze complex engineering problems, reaching substantiated conclusions with consideration for the holistic nature of the problem.

**PO3: Design/Development of Solutions:** Design creative solutions for complex engineering problems and design systems, components, or processes to meet identified needs with consideration for public health and safety, and cultural, societal, and environmental factors

**PO4: Conduct Investigations of Complex Problems:** Conduct investigations of complex engineering problems using research-based knowledge and research methods, including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions.

**PO5: Engineering Tool Usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling, recognizing their limitations.

**PO6: The Engineer and the World:** Analyze and evaluate societal and environmental aspects while solving complex engineering problems, considering their impact on sustainability, economy, health, safety, legal frameworks, culture, and environment.

**PO7: Ethics:** Apply ethical principles and commit to professional ethics, human values, diversity, and inclusion; and adhere to relevant national and international laws.

**PO8: Individual and Collaborative Teamwork:** Function effectively as an individual, and as a member or leader in diverse and multi-disciplinary teams.

**PO9: Communication:** Communicate effectively and inclusively with the engineering community and society through reports, documentation, presentations, and consideration of cultural and language differences.

**PO10: Project Management and Finance:** Apply engineering management principles and economic decision-making to manage projects in multidisciplinary environments.

**PO11: Life-Long Learning:** Recognize the need for independent and life-long learning, adaptability to new technologies, and critical thinking.