

Institute of Engineering & Management
Department of Computer Science and Engineering
(AY 2021-2022)

PROGRAM OUTCOMES (POs)

List of Program Outcomes

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, 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.
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Program Specific Outcomes (PSOs)

List of Program Specific Outcomes

PSO1	Ability to understand the principles and development methodologies of computer systems so as to enable students to assess computer hardware and possess professional skills and knowledge of software design process.
PSO2	Ability to apply mathematical solutions for computational task, model real world problems using appropriate data structure and suitable algorithm.
PSO3	Ability to use knowledge in varied domains to identify research gaps and hence to provide integrated solutions to new ideas and innovations.

Program Educational Objectives (PEO)

PEO 01: High Quality Engineering Design and Development Work: Graduates of the program will engage in the effective practice of computer science and engineering to identify and solve important problems in a diverse range of application areas.

PEO 02: Real Life Problem Solving: To educate students with proficiency in core areas of Computer science & Engineering and related engineering so as to comprehend engineering trade-offs, analyze, design, and synthesize data and technical concepts to create novel products and solutions for the real-life problems.

PEO 03: Leadership: Graduates of the program will engage in successful careers in industry, academia and attain positions of importance where they have impact on their business, profession and community.

PEO 04: Lifelong Learning: Graduates of the program will adapt to contemporary technologies, tools and methodologies to remain at the frontier of computer science and engineering practice with the ability to respond to the need of a challenging environment.

Correlation between POs and PSOs

POs	PSO1	PSO2	PSO3
PO1	S	S	M
PO2	S	S	S
PO3	S	S	M
PO4	M	S	S
PO5	M	M	S
PO6	W	W	S
PO7	M	W	S
PO8	W	M	M
PO9	M	M	W
PO10	S	M	S
PO11	M	W	M
PO12	S	S	S

S, M, W: - Indicate strong, medium, and weak correlation respectively