

Program Educational Objectives (PEOs)

PEO 1: Graduates will serve the community through the effective use of the concepts and techniques of computer systems engineering by contributing research and development based innovative solutions for sustainable development

PEO 2: Graduates will exhibit aptitude for leadership, teamwork, collaboration, independent learning and effective interpersonal communication skills, and will abide by the code of ethics and professional engineering practices.

PEO 3: Graduates will be motivated to demonstrate continuous learning and skill development, so as to function and survive in a competitive landscape.

Program Learning Outcomes (PLOs)

Program Learning Outcomes (PLOs) are the narrower statements that describe what students are expected to know and be able to do by the time of graduation. Following are the set of PLOs with brief description.

1. Engineering Knowledge

Apply knowledge of mathematics, natural science, engineering fundamentals and Engineering specialization to the solution of complex engineering problems.

2. Problem Analysis

Identify, formulate, conduct research literature, and analyse complex Engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

3. Design/Development of Solutions

An ability to 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.

4. Investigation

Conduct investigation 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.

5. Tool Usage

Create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex Engineering problems, with an understanding of the limitations.

6. The Engineer and the World

Analyze and evaluate sustainable development impacts to society, the economy, sustainability, health and safety, legal frameworks, and the environment while solving complex engineering problems.

7. Ethics

Apply ethical principles and commit to professional ethics and norms of engineering practice and adhere to relevant national and international laws. Demonstrate an understanding of the need for diversity and inclusion.

8. Individual and Collaborative Team Work

Function effectively as an individual, and as a member or leader in diverse and inclusive teams and in multi-disciplinary, face-to-face, remote and distributed settings.

9. Communication

Communicate effectively and inclusively 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, and make effective presentations, taking into account cultural, language, and learning differences.

10. Project Management and Finance

Demonstrate knowledge and understanding of engineering management principles and economic decision-making and apply these to one's own work, as a member and leader in a team, to manage projects in multidisciplinary environments.

11. Lifelong Learning

Recognize the need for, and have the preparation and ability for i) independent and lifelong learning ii) adaptability to new and emerging technologies and iii) critical thinking in the broadest context of technological change.