



## Programme Outcomes:

Engineering Graduates will able to:

### **PO 1: Engineering knowledge:**

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

### **PO 2: Problem analysis:**

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

### **PO 3: 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.

### **PO 4: 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.

### **PO 5: 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.

### **PO 6: 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.



**PO 7: 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.

**PO 8: Ethics:**

Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

**PO 9: Individual and teamwork:**

Function effectively as an individual, and as a member or leader in diverse teams, and in multi-disciplinary settings.

**PO 10: 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.

**PO 11: 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 multi-disciplinary 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.

**Program Educational Objectives (PEOs):**

**PEO1:** To prepare globally competent graduates having strong fundamentals, domain knowledge, updated with modern technology to provide the effective solutions for engineering problems.



**PEO2:** To prepare the graduates to work as a committed professional with strong professional ethics and values, sense of responsibilities, understanding of legal, safety, health, societal, cultural and environmental issues.

**PEO3:** To prepare committed and motivated graduates with research attitude, lifelong learning, investigative approach, and multidisciplinary thinking.

**PEO4:** To prepare the graduates with managerial and communication skills to work effectively as individual as well as in teams.

### **Program Specific Objectives (PSO's):**

Students will be able to

**PSO.1:** Understand and solve problems using Mathematical Concepts, Algorithmic & Programming Knowledge

**PSO.2:** Design and develop software solutions using various programming environments for multidisciplinary applications.

**PSO.3:** Analyze complex engineering problems using core and advanced knowledge of CSE to provide better solution.

**PSO.4:** Demonstrate awareness towards Professional Ethics, Environment Aspects, Social Issue and readiness for life long learning.



## Course Outcome (Projects):

After completion of this course, student will be able to,

1. Analyze and investigate the problem by applying Computer Science and Engineering knowledge.
2. Design the solution for the identified problem by using modern software tools and techniques.
3. Develop the IT project in accordance with management standards adhering to time schedule.
4. Demonstrate an awareness towards societal, environmental, professional, and ethical standards.
5. Acquire communication skills to work as a member or leader in a team to manage software projects.
6. Practice the skills, diligence, and commitment to excellence required to engage in lifelong learning with respect to technological changes.

## Course Outcome (Seminar):

After completion of this course, student will be able to,

1. Understand, review, and summarize the latest technologies in the field of Computer Science and Engineering.
2. Demonstrate the ability to perform critical readings of their own writing and the writing of others.
3. Prepare seminar effectively by compiling relevant technical information ethically.
4. Exhibit the ability to communicate and present effectively.
5. Respond to questions, comments and opinions put forward by the experts and classroom audience.
6. Develop habit of learning recent topics useful for higher studies and lifelong learning.