DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING B.E. - COMPUTER SCIENCE AND ENGINEERING

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- **PEO1:** The graduates will accomplish to solve problems in Computer Science and Engineering by applying Mathematical, Scientific and Engineering fundamentals and also to pursue higher education effectively
- **PEO2:** The graduates will engage them in lifelong learning to acquire and update professional skills and to meet out the demands of global technological changes, by the way of research and involving in technical and societal events
- **PEO3:** The graduates will impart to sustain high professionalism, ethical standards and effective communication skills in order to work as a part of team on multidisciplinary projects as well as diverse professional environment



JAI SHRIRAM ENGINEERING COLLEGE TIRUPPUR – 638 660



Approved by AICTE, New Delhi & Affiliated to Anna University, Chenna Recognized by UGC & Accredited by NAAC and NBA (CSE and ECE)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING B.E. - COMPUTER SCIENCE AND ENGINEERING

PROGRAM OUTCOMES (POs)

- **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, review 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

PROGRAM SPECIFIC OUTCOMES (PSOs)

The students will be able to

- **PSO1:** Analyze and Design quality software solutions for scientific and business applications by practicing the concepts of Computer Science and Engineering
- **PSO2**: Develop programming skills to solve real world problems related to social issues with ethical values