## Suryodaya College of Engineering & Technology Department of Electrical Engineering

## **PROGRAMME EDUCATIONAL OBJECTIVES (PEOS)**

**PEO 1:** - To provide Graduates with a solid foundation in mathematical, scientific and engineering fundamentals and depth and breadth studies in Electrical and Electronics engineering, so as to comprehend, analyse, design, provide solutions for practical issues in engineering.

PEO 2: - To strive for Graduates' achievement and success in the profession or higher studies, which they may pursue.

**PEO 3**: - To inculcate in Graduates professional and ethical attitude, effective communication skills, teamwork skills, multidisciplinary approach, the lifelong learning needs and an ability to relate engineering issues for a successful professional career.

## **PROGRAM OUTCOMES (POS)**

Engineering Students will be able to

**PO1: Engineering Knowledge:** - Apply the knowledge of Mathematics, Science, Engineering fundamentals, and Electrical Engineering 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 & 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 & sustainability: -** Understand the impact of the professional Engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and the need for sustainable developments.

**PO8: Ethics: -** Apply ethical principles and commit to professional ethics and responsibilities and norms of the Engineering practice.

**PO9: Individual & team work: -** Apply the knowledge of Mathematics, Science, Engineering fundamentals, and Mechanical Engineering to the solution of complex engineering problems.

**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 & 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.