PROGRAMME OUTCOMES

Program outcomes are narrower statements that describe what students are expected to know and be able to do by the time of graduation. These relate to the skills, knowledge and behavior.

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 modelling 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.

PROGRAMME SPECIFIC OUTCOMES

The graduates of Electrical and electronics engineering program of Sapthagiri College of **Engineering should be able to attain the following at the time of graduation.**

	PROGRAM SPECIFIC OUTCOMES
PSO1	**The application and fundamental knowledge to idenenfity, formulate and investigate various real time problems of electrical machines, power electronics, control systems, high voltage engineering, power systems and microcontroller.**
PSO2	The application of recent technique along with modern software tools (like MATLAB, AUTOCAD-ELETRICAL, Mi POWER etc) for designing, simulating and analyzing electrical systems as well as electronics system to engage in life-long learning.
PSO3	The utilization of knowledge regarding project management techniques and sustainable technologies for developing projects in varies applications like renewable energy, power systems, high voltage engineering, industrial drives and microcontroller.

PROGRAM EDUCATIONAL OBJECTIVES

The program educational objectives are the statements that describe the expected achievements of graduates within first few years of their graduation from the program. The program educational objectives of **Bachelor of Electrical and Electronics Engineering** at Sapthagiri College of Engineering can be broadly defined on four counts:

	PROGRAM EDUCATIONAL OBJECTIVES
PEO 01	**Employability:** An ability to contribute to industrial services and/or government organizations by applying their skills through formal education and co-operative educational experiences.
PEO 02	**Core Competence:** An ability to apply Scientific, Mathematics and Engineering fundamentals gained to comprehend, analyze, design and create novel products and solutions for real life problems.
PEO 03	**Professionalism:** An ability to embrace professional and ethical attitude/effective communication skills, team skills, multidisciplinary approach to resolve problems and inform, educate and persuade diversified audiences.
PEO 04	**Learning Environment & Socialism:** A skill to update knowledge with emerging technologies by professional communities, higher education to nourish ever-developing careers and to strengthen human values and social responsibilities to contribute towards society.