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

At the end of the B.E Biotechnology Engineering program, the students are expected to have developed the following program specific outcomes.

	PROGRAM SPECIFIC OUTCOMES
PSO1	PSO 1: Acquire exhaustive knowledge of theoretical and practical aspects in biotechnology
PSO2	PSO 2: Apply the accomplished skills and modern tools to obtain sustainable solutions to complex.
PSO3	PSO 3: Decipher the interdisciplinary skills of biotechnology to address the different ethical, legal, social issues at the industrial production.

PROGRAM EDUCATIONAL OBJECTIVES

The program educational objectives of Bachelor of Engineering in Biotechnology at Sapthagiri College of Engineering are broadly defined on following four counts.

	PROGRAM EDUCATIONAL OBJECTIVES
PEO 01	Students will be in lucrative professionals in different sectors of Biotechnology fields with high proficiency in multidisciplinary tasks.
PEO 02	Operate technically at competent level in concocting problems of biotechnology and utilize the knowledge to develop Biological processes and Bio-techniques.
PEO 03	Students will endure higher education with harmonious combination of the skills of engineering, management & life science.
PEO 04	Students will inculcate Socio-ethical values, exhibit professionalism, team spirit for lifelong learning and well-being of society and mankind.