

## **Program Outcomes**

**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 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.

## **Long Term Goals**

- Enhance the practice of project based learning (PBL) approach for UG Programmes
- Expand the capabilities of the existing research center in the department for the benefit of the society
- Establish the department as a recognized center of the excellence among SPPU-Affiliated colleges
- Encourage and empower students to take up entrepreneurship in the field and allied disciplines
- International conference in the area of telecommunication engineering

## **Short Term Goals**

- Equip students with the knowledge and skills necessary to comprehend, formulate, analyze and resolve challenging engineering problems in the field of electronics and telecommunication
- Encourage students with industry-specific projects so they obtain essential employment in inter-disciplinary or multi-disciplinary sectors
- Engage students in learning and self-development activities by hosting national and international seminars, workshops and conferences
- Initiate value added programs and co-curricular activities for employability enhancement and personality development

## **Programmed Educational Objectives (PEOs)**

1. Graduate will excel in professional career in various specifications of Electronics and Telecommunication engineering and allied interdisciplinary areas.
2. Graduate will exhibit strong fundamentals required to pursue higher education and continue professional development in Electronics and telecommunication and other fields.
3. Graduate will adhere to professional ethics; develop team spirit and effective communication skills to be successful leaders with a holistic approach.
4. Graduate will be sensitive to societal and environmental issues for sustainable development while doing their professional work.