

**SREE VIDYANIKETHAN ENGINEERING COLLEGE  
(AUTONOMOUS)**

Sree Sainath Nagar, Tirupati – 517 102

Department of Electronics and Communication Engineering

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**SVEC-16**

**B. Tech. (Electronics and Communication Engineering)**

**Program Educational Objectives:**

After few years of completion of the Program, the graduates of B. Tech. (ECE) would have

- PEO1.** Enrolled or completed higher education in the core or allied areas of electronics and communication engineering or management.
- PEO2.** Successful entrepreneurial or technical career in the core or allied areas of electronics and communication engineering.
- PEO3.** Continued to learn and to adapt to the world of constantly evolving technologies in the core or allied areas of electronics and communication engineering.

**Program Outcomes:**

On successful completion of the Program, the graduates of B. Tech. (ECE) will be able to

- PO1.** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- PO2.** Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- PO3.** 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.** 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.** 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.** 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.** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- PO8.** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- PO9.** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- PO10.** 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.** 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.** 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:**

On successful completion of the Program, the graduates of B. Tech. (ECE) will be able to

- PSO1.** Apply the knowledge of Electronics, Signal Processing, Communications, and VLSI & Embedded Systems to the solutions of real world problems.
- PSO2.** Analyze, Design and Develop solutions in real time in the domains of Electronics, Signal Processing, Communications, and VLSI & Embedded Systems.
- PSO3.** Conduct investigations and address complex engineering problems in the domains of Electronics, Signal Processing, Communications, and VLSI & Embedded Systems.
- PSO4.** Apply appropriate techniques, resources, and modern tools to complex engineering systems and processes in the domains of Electronics, Signal Processing, Communications, and VLSI & Embedded Systems.