



SREE VIDYANIKETHAN ENGINEERING COLLEGE **(Autonomous)**

Sree Sainath Nagar, Tirupathi – 517 102

Department of Electrical and Electronics Engineering

B.Tech. in EEE **SVEC – 19**

The Department is offering B.Tech. in Electrical and Electronics Engineering (EEE) with an intake of 60 followed by an increase to 120 in the year 2007, 180 and 240 in the years 2012 and 2014 respectively, besides an additional 10% though Lateral Entry scheme. The B.Tech. Program was Re-accredited (fourth cycle of Accreditation) by NBA for three years (03.03.2020 to 30.06.2023). Also the Department is offering Minor/Honor Degree in Electric Vehicles.

Program Educational Objectives:

After few years of graduation, the graduates of B.Tech. (EEE) Program will be:

- PEO1. enrolled in academic program in the disciplines of electrical engineering, multidisciplinary areas and management studies.
- PEO2. become entrepreneurs or be employed as productive and valued engineers in reputed industries.
- PEO3. engage in lifelong learning, career enhancement and adopt to changing professional and societal needs.

Program Outcomes:

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

- PSO1. **Plan to conserve and harness** electrical energy using electrical and electronic systems for **sustainability**.
- PSO2. Use domain specific **tools** to **analyze, design and develop** electrical and electronic systems for feasible operation and control of Electrical and Electronic Systems.
- PSO3. Develop **operating strategies** for utilization of energy and **application** of Electrical

and Electronics systems in relevance to industry and society.