**SREE VIDYANIKETHAN ENGINEERING COLLEGE**

**(AUTONOMOUS)**

SreeSainath Nagar, A.Rangampet - 517 102

**VISION**

To become the Nation’s premiere centre of excellence in electrical engineering through teaching, training, research and innovation to create competent engineering professionals with values and ethics.

**MISSION**

* To foster intellectual curiosity, pursuit and dissemination of knowledge.
* To explore students’ potential through academic freedom and integrity.
* To promote technical mastery and nurture skilled professionals to face competition in ever increasing complex world.

**QUALITY POLICY**

Sree Vidyanikethan Engineering College strives to establish a system of Quality Assurance to continuously address, monitor and evaluate the quality of education offered to students, thus promoting effective teaching processes for the benefit of students and making the College a Centre of Excellence for Engineering and Technological studies.

**DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

**Vision**

To become the Nation’s premiere centre of excellence in electrical engineering through teaching, training, research and innovation to create competent engineering professionals with values and ethics.

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**Mission**

* Department of Electrical Engineering strives to create human resources in Electrical Engineering to contribute to the nation development and improve the quality of life.
* Imparting Knowledge through implementing modern curriculum, academic flexibility and learner centric teaching methods in Electrical Engineering
* Inspiring students for aptitude to research and innovation by exposing them to industry and societal needs to creating solutions for contemporary problems
* Honing technical and soft skills for enhanced learning outcomes and employability of students with diverse background through comprehensive training methodologies
* Inculcate values and ethics among students for a holistic engineering professional practice.

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

**Program Educational Objectives**

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

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| **PEO1.** | have enrolled in academic program in the disciplines of electrical engineering and multidisciplinary areas. |
| **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:

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| **PO1** | **Engineering knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals, and concepts of engineering to the solution of complex engineering problems. |
| **PO2** | **Problem analysis**: Identify, formulate, review 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** | **Tools and Techniques:** 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** | **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. |

**Program Specific Outcomes**

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

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| **PSO1.** | Demonstrate knowledge of Electrical and Electronic circuits, Electrical Machines, Power Systems, Control Systems, and Power Electronics for solving problems in electrical and electronics engineering. |
| **PSO2.** | Analyze, design, test and maintain electrical systems to meet the specific needs of the Industry and society. |
| **PSO3.** | Conduct investigations to address complex engineering problems in the areas of Electrical Machines, Power Systems, Control Systems and Power Electronics. |
| **PSO4.** | Apply appropriate techniques, resources and modern tools to provide solutions for problems related to electrical and electronics engineering. |