SREE VIDYANIKETHAN ENGINEERING COLLEGE

(AUTONOMOUS)

SREE SAINATH NAGAR, TIRUPATI-517 102

<u>Department of Electrical and Electronics Engineering</u> M.Tech – Power Electronics and Drives

Program Outcomes:

After Successful completion of the Programme, post graduates of M. Tech in Power Electronics and Drives will be able to

- PO1. Acquire in-depth knowledge of specific discipline or professional area, including wider and global perspective, with an ability to discriminate, evaluate, analyse and synthesis existing and new knowledge, and integration of the same for enhancement of knowledge. (Scholarship of Knowledge)
- PO2. Analyze complex engineering problems critically, apply independent judgment for synthesizing information to make intellectual and/or creative advances for conducting research in a wider theoretical, practical and policy context. (**Critical Thinking**)
- PO3. Think laterally and originally, conceptualise and solve engineering problems, evaluate a wide range of potential solutions for those problems and arrive at feasible, optimal solutions after considering public health and safety, cultural, societal and environmental factors in the core areas of expertise. (**Problem Solving**)
- PO4. Extract information pertinent to unfamiliar problems through literature survey and experiments, apply appropriate research methodologies, techniques and tools, design, conduct experiments, analyse and interpret data, demonstrate higher order skill and view things in a broader perspective, contribute individually/in group(s) to the development of scientific/technological knowledge in one or more domains of engineering. (**Research Skill**)
- PO5. Create, select, learn 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. (**Usage of modern tools**)
- PO6. Possess knowledge and understanding of group dynamics, recognise opportunities and contribute positively to collaborative-multidisciplinary scientific research, demonstrate a capacity for self-management and teamwork, decision-making based on open-mindedness, objectivity and rational analysis in order to achieve common goals and further the learning of themselves as well as others. (Collaborative and Multidisciplinary work)
- PO7. Demonstrate knowledge and understanding of engineering and management principles and apply the same to one's own work, as a member and leader in a team, manage

- projects efficiently in respective disciplines and multidisciplinary environments after considerisation of economical and financial factors. (**Project Management and Finance**)
- PO8. Communicate with the engineering community, and with society at large, regarding complex engineering activities confidently and effectively, such as, being able to comprehend and write effective reports and design documentation by adhering to appropriate standards, make effective presentations, and give and receive clear instructions. (**Communication**)
- PO9. Recognise the need for, and have the preparation and ability to engage in life-long learning independently, with a high level of enthusiasm and commitment to improve knowledge and competence continuously. (**Life-long Learning**)
- PO10. Acquire professional and intellectual integrity, professional code of conduct, ethics of research and scholarship, consideration of the impact of research outcomes on professional practices and an understanding of responsibility to contribute to the community for sustainable development of society. (Ethical Practices and Social Responsibility)
- PO11. Observe and examine critically the outcomes of one's actions and make corrective measures subsequently, and learn from mistakes without depending on external feedback.

 (Independent and Reflective Learning)