Program Educational Objectives (PEOs)

The main objective of the B.Tech. programme in Electrical and Electronics Engineering is to prepare students for either one or more of the following:

- 1. graduate study
- 2. research and development work in government or industrial laboratories
- 3. work in power sector and public sector undertakings
- 4. work in electronic circuit design and fabrication industries
- 5. work in IT and ITES industries

Programme outcomes POs:

The students who have undergone the programme

- 1. will have an ability to apply knowledge of mathematics and science in electrical engineering problem.
- 2. will have an ability to identify the problems and provide solutions by designing and conducting experiments, interpreting and analysing data, and reporting the results.
- 3. will have comprehensive understanding of the entire range of electronic/Power electronic devices available.
- 4. will be able to control and convert power for industrial applications from their knowledge and exposure on different configurations into which the devices are connected.
- 5. will have in-depth knowledge in transmission and distribution systems, power system analysis and protection systems, which will be a shot in the arm of the students who wish to pursue a career in the power sector.
- 6. will have a good knowledge in data structures, object oriented programming, operating systems and computer architecture.

- 7. will have an ability to use the techniques & skills on modern Electrical & Electronics engineering software tools such as MATLAB, PSCAD, PSIM, PROTEUS VSM, ETAP, MiPOWER, OrCAD etc., for engineering practice.
- 8. will have a sound knowledge in the areas of analog and digital Electronics with added state-of art knowledge on VLSI systems.
- 9. will be able to take up projects related to electrical and electronic hardware implementations.
- 10. will be able to develop application programs related to modelling, simulation, instrumentation and control of engineering systems.
- 11. will have an ability to participate as members of engineering and science laboratory teams as well as members of multidisciplinary design teams.
- 12.will demonstrate the ability to choose and apply appropriate resource management technique/s so as to optimally utilize the resources available.
- 13.will be proficient in English language in both verbal and written forms which will enable them to compete with graduates of international engineering institutions.
- 14.will have the confidence to apply engineering solutions in global and societal contexts.
- 15. should be capable of self-education and clearly understand the value of achieving perfection in their professional endeavours.
- 16. will understand and uphold professional, ethical and social responsibilities.
- 17. will be able to design and build renewable energy systems for developing clean energy and sustainable technologies.