



Department of Electrical Engineering College of Engineering Trivandrum

VISION AND MISSION OF COLLEGE

Vision Statement

National Level Excellence and International Visibility in Every Facet of Engineering Research and Education.

Mission Statement

- To facilitate quality transformative education in Engineering and Management.
- To foster innovations in Technology and its application for meeting global challenges.
- To pursue and disseminate Quality Research.
- To equip, enrich and transform students to be Responsible Professionals for better service to humanity.

VISION AND MISSION OF THE DEPARTMENT

Vision

Be a centre of excellence and higher learning in Electrical Engineering and allied areas.

Mission

- To impart quality education in Electrical Engineering and bring-up professionally competent engineers.
- To mould ethically sound and socially responsible Electrical Engineers with leadership qualities.
- To inculcate research attitude among students and encourage them to pursue higher studies.

B.Tech in Electrical and Electronics Engineering

Program Outcomes (POs)

(Components indicative of the graduate's potential to acquire competence to practice at the appropriate level)

1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. 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.
3. 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.
4. 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.
5. Modern tool usage: 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.
6. The 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.
7. 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.
8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. 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.
11. 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.
12. 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.

B.Tech in Electrical and Electronics Engineering	
Program Specific Outcomes (PSOs) (What the graduates of a specific undergraduate engineering program should be able to do at the time of graduation)	<p>PSO1: Apply engineering knowledge to analyse, model, design and operate modern systems for generation, transmission, distribution and control of electrical power.</p> <p>PSO2: Design, develop and test modern hardware and software systems for signal processing, measurement, instrumentation and control applications.</p>

B.Tech in Electrical and Electronics Engineering	
Program Educational Objectives (PEOs) (Broad statements that describe the career and professional accomplishments that the graduates should achieve in three to five years after graduation)	<p>Graduates will</p> <ol style="list-style-type: none">1. excel as technically competent electrical engineers.2. excel in higher studies and build on fundamental knowledge to develop technical skills within and across disciplines.3. have the ability to function effectively as members or leaders in technical teams.4. adapt to changes in global technological scenario and societal needs through lifelong learning