**Dhirajlal Gandhi College of Technology**

**Department of Electrical and Electronics Engineering**

## Programme Educational Objectives (PEOS)

I. Our graduates are able to meet industry demands and do higher studies.

II. Our graduates are able to apply widen and in-depth knowledge of Electrical and Engineering to analyse the realistic problems and creative thinking to provide innovative solutions with appropriate technologies.

III. Our graduates are able to adapt the roles and responsibilities and demonstrate leaderships in solving emerging Electrical and Electronics Engineering problems within the organization and society at national and international levels.

## Programme Outcomes (POs)

a. Apply the knowledge of mathematics, science, engineering fundamentals to the solution of complex problems in Electrical and Electronics Engineering.

b. Identify, formulate, research literature, and analyse complex Electrical and Electronics Engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

c. Design solutions for complex Electrical and Electronics 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.

d. 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 related to Electrical and Electronics Engineering.

e. Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex Electrical and Electronics Engineering activities with an understanding of the limitations.

f. 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.

g. Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

h. Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

i. Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

j. 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.

k. 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.

l. Recognise the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

## Programme Specific Outcomes (PSOs)

1. Ability to familiarize with industrial automation, protective equipments and electrical estimation.
2. Ability to use the MATLAB software to design, simulate and analyze electrical and electronic circuits.