

**Department of Electrical Engineering
College of Engineering Pune**

Program Educational Objectives (PEOs)

After the completion of the program

PEO-1 Student will be employable in the diversified sectors of the industry, government organizations, public sector and research organizations.

PEO-2 Student will pursue higher education in electrical engineering or other fields of their interests, at institutes of repute and high ranking.

PEO-3 Student will demonstrate effective communication, life long learning ability, integrity, team work, leadership qualities, concern to environment and commitment to safety, health, legal and cultural issues in the fields they choose to pursue.

Program Outcomes (POs):

Engineering Graduate will be able to:

PO1: Engineering Knowledge: Apply the knowledge of mathematics ,science , engineering fundamentals , and an engineering specialization to the solution of complex engineering problem

PO2: Problem Analysis: Identify , Formulate , review research literature , and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics , natural science, and engineering sciences

PO3: Design/Development solution: Design solution for complex engineering problems& design system component or process that meet the specified needs with appropriate consideration for the public health & safety , and the cultural , social & environmental conditions

PO4: Conduct investigation of complex problem: Use research based knowledge &

research methods including design of experiments , analysis and interpretation of data and synthesis of the information to provide valid conclusion

PO5: Method tool usage: create , select and apply appropriately technique, resources , and modern engineering and IT tools including prediction and modelling to complex engineering activities with understanding the limitation

PO6: The engineer & society: Apply reasoning informed by the contextual knowledge to access societal , health , safety , legal & cultural and consequent responsibility relevant to the professional engineering practice

PO7: Environment & sustainability: understand the impact of the professional engineering solution in societal & environmental context , and demonstrate the knowledge of, and need for sustainable development

PO8: Ethics: Apply ethical principle and commitment to professional ethics and responsibilities and norms of the engineering practices

PO9: Individual & team work: Function effectively as an individual , and as the member or leader in diverse team and multidisciplinary setting

PO10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large , such as , and being able to comprehend and write effective reports & design documentation & effective presentation and give & receive clear instructions

PO11: Project management & Finance: Demonstrate knowledge & understanding of the engineering and management principles & apply these to ones work , as the member & the leader in a team to manage projects and in multidisciplinary environment

PO12: Life Long Learning: Recognize the need for , and have the preparation and ability to engage in independent and life long learning in broadest context of technological change

PSO1: To design and develop power electronics hardware and its control to cater the needs of industry Such as electric vehicles, renewable interconnections, smart grid and micro-grid

PSO2:To analyse and solve the problems related to smart grid using modern techniques and tools

PSO3: To design, simulate, and make prototype of special purpose machines for enhancing the Performance.

