PROGRAM EDUCATIONAL OBJECTIVE (PEOs) OF ELECTRICAL ENGINEERING

PEO 1: Graduate demonstrating a blend of engineering technology and professional skills in Electrical Engineering and allied disciplines.

PEO 2: Graduate performing ethically and socially in a sustainable and responsible manner, as an individual and team member.

PEO 3: Graduate striving to enhance learning and practicing skills.

PROGRAM LEARNING OUTCOMES (PLOs) OF ELECTRICAL ENGINEERING

PEO 1: Engineering Knowledge: An ability to apply knowledge of mathematics, science and engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

PEO 2: Problem Analysis: An ability to identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

PEO 3: Design/Development of Solutions: An ability to design solutions for complex engineering problems and design systems, components, or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

PEO 4: Investigation: An ability to investigate complex engineering problems in a methodical way including literature survey, design and conduct of experiments, analysis and interpretation of experimental data, and synthesis of information to derive valid conclusions.

PEO 5: Modern Tool Usage: An ability to 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.

PEO 6: The Engineer and Society: An ability to apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solution to complex engineering problems.

PEO 7: Environment and Sustainability: An ability to understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.

PEO 8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.

PEO 9: Individual and Team Work: An ability to work effectively, as an individual or in a team, on multifaceted and/or multi disciplinary settings.

PEO 10: Communication: An ability to communicate effectively, orally as well as in writing 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.

PEO 11: Project Management: Ability to demonstrate management skills and apply engineering principles to one's own work, as a member and/or leader in a team to manage projects in a multidisciplinary environment.

PEO 12: Lifelong Learning: An ability to recognize importance of, and pursue lifelong learning in the broader context of innovation and technological developments.

PROGRAM EDUCATIONAL OBJECTIVE (PEOs) OF ELECTRICAL ENGINEERING TECH

PEO 1: Graduate demonstrating a blend of engineering technology and professional skills in Electrical Technology and allied disciplines.

PEO 2: Graduate performing ethically and socially in responsible manner, as an individual and team member.

PEO 3: Graduate striving to enhance learning and managerial skills.

PROGRAM LEARNING OUTCOMES (PLOs) OF ELECTRICAL ENGINEERING TECH

PLO 1: Technology Knowledge: An ability to apply knowledge of mathematics, natural science, technology fundamentals and technology specialization to defined and applied technology procedures, processes, systems or methodologies.

PLO 2: Problem Analysis: An ability to Identify, formulate, research literature and analyze broadly-defined technology problems reaching substantiated conclusions using analytical tools appropriate to the discipline or area of specialization.

PLO 3: Design/Development of Solutions: An ability to design solutions for broadly- defined technology problems and contribute to the design of systems, components or processes to meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

PLO 4: Investigation: An ability to conduct investigations of broadly-defined problems; locate, search and select relevant data from codes, data bases and literature, design and conduct experiments to provide valid conclusions.

PLO 5: Modern Tool Usage: An ability to create, select and apply appropriate techniques, resources, and modern technology and IT tools, including prediction and modeling, to broadly-defined technology problems, with an understanding of the limitations.

PLO 6: The Technologist and Society: An ability to demonstrate understanding of the societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to technology practice and solutions to broadly defined technology problems.

PLO 7: Environment and Sustainability: An ability to understand and evaluate the sustainability and impact of technology work in the solution of broadly defined technology problems in societal and environmental contexts.

PLO 8: Ethics: Understand and commit to professional ethics and responsibilities and norms of technology practice.

PLO 9: Individual and Team Work: An ability to function effectively as an individual, and as a member or leader in diverse teams.

PLO 10: Communication: An ability to communicate effectively on broadly defined technology activities with the technologist community and with society at large, by being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PLO 11: Project Management: An ability to demonstrate knowledge and understanding of technology management principles and apply these to one's own work, as a member or leader in a team and to manage projects in multidisciplinary environments.

PLO 12: Lifelong Learning: An ability to recognize the need for, and have the ability to engage in independent and lifelong learning in specialist technologies.