



PROGRAMME EDUCATIONAL OBJECTIVES

PEO1: Become competent and engaged engineering professionals, applying their technical and managerial skills in the planning, design, construction, operation or maintenance of the built environment and global infrastructure, and utilizing their skills to analyze and design systems, specify project methods and materials, perform cost estimates and analyses, and manage technical activities in support of civil engineering projects and become capable to do complex projects based on subject knowledge as well as on the lines of research.

PEO2: Establish an understanding of professionalism, ethics, quality performance, public policy, safety, and sustainability that allows them to be professional leaders and contributors to society when solving engineering problems and producing civil engineering solutions.

PEO3: Develop their communication skills in oral, written, visual and graphic modes when working as individuals or team members or leaders, so that they can actively participate in their communities and their profession.

PEO4: Initiate an active program of life-long learning, including studies leading to professional licensure or an advanced degree in engineering that provides for continued development of their technical abilities and management skills, and attainment of professional expertise.



MAHAGURU INSTITUTE OF TECHNOLOGY

Approved by AICTE and Affiliated to APJ Abdul Kalam Technological University

Accredited by NAAC with B+ Grade

PROGRAMME SPECIFIC OUTCOMES

PSO1: Apply fundamental computational methods and elementary analytical techniques in sub-disciplines related to civil engineering.

PSO2: Perform analyses related to design, construction, operations and maintenance of systems associated with civil engineering and also select appropriate engineering materials and practices for these purposes.

PSO3: Utilize principles, hardware, and software that are appropriate to produce drawings, reports, quantity estimates, and other documents related to civil engineering.



PROGRAMME OUTCOMES

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

PO2: 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.

PO3: 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.

PO4: .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.

PO5: 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.

PO6: 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.

PO7: 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.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: 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.

PO11: 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.

PO12: 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.