IIMT COLLEGE OF ENGINEERING, GREATER NOIDA

(Civil Engineering Department)

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POs		Engineering Graduates 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 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 teamwork**	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.

Program Outcomes
Program Educational Objectives

- **PEO1:** Civil Engineering graduates will be able to apply learnt knowledge and skills required for functioning effectively in an organization.
- **PEO2:** Civil Engineering graduates will be actively involved in pursuing higher education and focused research targeting solutions to modern society challenges.
- **PEO3:** Graduates of the program will be able to acknowledge their responsibilities to the society globally and the need to behave ethically and morally.
- **PEO4:** Civil Engineering Graduates will be able to apply elements of entrepreneurship such as active discovery and exploitation of opportunities for developing novel ideas or methods.

Program Specific Outcomes

- **PSO1:** Analyze and design of water supply schemes, waste treatment and disposal systems for developing sustainable environment using modern software/IT tools.
- **PSO2:** Analyze and design framed and load bearing structures using principle of engineering mechanics and geotechnical engineering, as per the requirements of Indian and other standards with modern software/IT tools.
- **PSO3:** Produce detailed drawings and maps, write specifications, prepare cost estimates, design, and test construction materials, and carry out construction project management of sustainable infrastructure facilities using modern software/IT tools.
- **PSO4:** Understand and apply modern surveying tools and techniques for planning and designing of urban and rural infrastructure facilities to ensure sustainable development.