

## Program Learning Outcomes (PLOs) BSc Environmental Engineering

Title	Type	Description
1.	<b>Engineering Knowledge</b>	Graduates of the program will be able to apply knowledge of mathematics, science, and engineering fundamentals to the solution of complex engineering problems.
2.	<b>Problem Analysis</b>	Graduates of the program will be skilled in identifying, formulating, researching literature, and analyzing complex engineering problems, reaching substantiated conclusions using the first principles of mathematics, natural sciences, and engineering.
3.	<b>Design / Development of Solutions</b>	Graduates of the program will be capable of designing solutions for complex engineering problems and designing systems, components, or processes that meet specified needs with appropriate consideration for public health and safety, as well as cultural, societal, and environmental considerations.
4.	<b>Investigation</b>	Graduates of the program will be prepared to investigate complex engineering problems methodically, including a literature survey, design and conduct of experiments, analysis and interpretation of experimental data, and synthesis of information to derive valid conclusions.
5.	<b>Modern Tool Usage</b>	Graduates of the program will be capable of creating, selecting, and applying appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex environmental engineering activities, with an understanding of the limitations.
6.	<b>The Engineer and Society</b>	Graduates of the program will be proficient in applying reasoning informed by contextual knowledge to assess societal, health, safety, legal, and cultural issues and the consequent responsibilities relevant to professional engineering practice and solutions to complex engineering problems.
7.	<b>Environment and Sustainability</b>	Graduates of the program will be capable of understanding the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.
8.	<b>Ethic</b>	Graduates of the program will be prepared to apply ethical principles and commit to professional ethics responsibilities and norms of engineering practice.
9.	<b>Individual and Team Work</b>	Graduates of the program will be able to work effectively, as an individual or in a team, in multifaceted and /or multidisciplinary settings.
10.	<b>Communication</b>	Graduates of the program will be capable of communicating 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.

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11.	<b>Project Management</b>	Graduates of the program will be able to demonstrate management skills and apply engineering principles to their work as a member and/or leader in a team to manage projects in a multidisciplinary environment.
12.	<b>Lifelong Learning</b>	Graduates of the program will be capable of recognizing the importance of and pursuing lifelong learning in the broader context of innovation and technological developments.