

Program Education Objectives (PEO)

The Department of Civil Engineering keeping in view interests of all their stakeholders have formulated the Program Educational Objectives (PEO's) that are comprehensive statements describing the career and professional accomplishments that the program is preparing the learner for.

PEO's of B.Tech Program in Civil Engineering are:

PEO 1: To prepare learners with a solid foundation in mathematics, sciences, and technical skills needed to analyze and design civil engineering problems

PEO 2: To prepare learners for meaningful work by applying their strong Civil Engineering business, leadership, and communication skills to meet the expectations of their employers.

PEO 3: To prepare learners to apply knowledge, strong reasoning, and quantitative skills to design and implement creative and sustainable solutions.

PEO 4: To prepare learners to effectively use modern equipments & programming tools to solve real life problems that are technically sound, economically feasible and socially acceptable.

PEO 5: To prepare learners for successful professional career, to excel in higher studies and or to become entrepreneur

PEO 6: To prepare learners to become responsible citizens by serving the community locally, nationally, and internationally.

Program Outcomes (POs)

- a. Apply the knowledge of mathematics, science, engineering fundamentals, and Engineering specialization to the solution of complex engineering problems.
- b. Identify, formulate, research literature, and analyze engineering problems to arrive at substantiated conclusions using first principles of mathematics, natural, and engineering sciences.
- c. Design solutions for complex engineering problems and design system components, processes to meet the specifications with consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- d. Use research-based knowledge including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- e. 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.
- f. 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.
- g. Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- h. Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- i. Function effectively as an individual, and as a member or leader in teams, and in multidisciplinary settings.

- j. Communicate effectively with the engineering community and with society at large. Be able to comprehend and write effective reports documentation. Make effective presentations, and give and receive clear instructions.
- k. Demonstrate knowledge and understanding of engineering and management principles and apply these to one's own work, as a member and leader in a team. Manage projects in multidisciplinary environments.
- l. 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 Specific Outcomes (PSOs)

- m. An ability to identify, analyze and design civil engineering problems and use of relevant codal provisions
- n. An ability to pursue research, higher studies, consultancy and face competitive examinations that offers challenging and rewarding careers in civil engineering

Mapping of PEOs, POs & PSOs

POs / PSOs PEOs	a	b	c	d	e	f	g	h	i	j	k	l	m	n
PEO 1	3	3	3	3	3	1	1	-	1	2	3	3	3	3
PEO 2	2	3	3	2	2	2	3	3	3	3	3	2	3	2
PEO 3	3	3	2	3	3	2	1	1	1	1	2	1	3	2
PEO 4	3	3	3	3	3	1	2	1	1	2	2	1	2	3
PEO 5	3	3	3	3	3	3	3	3	3	3	3	3	3	3
PEO 6	1	2	2	1	2	3	3	3	3	2	2	1	3	2