

Program Outcomes

- 1. Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization for the solution of complex engineering problems. (*Understand, remember, explain, describe, discuss, list*)
- 2. Problem analysis:** Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences. (*Demonstrate, select, compare, determine, analysis, differentiate, examine, solve, illustrate*)
- 3. 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 public health and safety, and cultural, societal, and environmental considerations. (*Design Assemble, compile, compose, construct, create, formulate, generate, modify, organize, perform, prepare*)
- 4. Conduct investigations of complex problems:** Use research based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions. (*Asses, choose, compare, conclude, criticize, discriminate, estimate, judge, justify, measure, relate summarize*)
- 5. 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. (*If solution is developed using any new tool/software or new theory/methodology, advanced technology*)
- 6. 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. (*If the application which is developed by engineers is in the interest of society which handling social, health, safety*)
- 7. 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. (*Addressing the environment issues solutions provided by engineers*)
- 8. Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings. (*Working as team activity like small projects, team activity, survey in team*)
- 10. Communication:** Communicate effectively on complex engineering activities with the engineering community and with the 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. (*Preparing report, gd activity seminar, presentation, group activity, co-curricular activity*)

11. 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.

12. 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.

Programme Specific Outcomes(CE)

- PSO1: The graduates of this programme will be able to meet the needs of society in design and execution of quality construction work considering the health, safety, cultural, societal and environmental factors and contribute to Nation's growth. The department's policy is to give the society a worthy citizen – a person of high intellectual, physical and moral attainments.(PO1,PO4. PO6, PO7, PO11)
- PSO2: The graduates will analyze and design regular and complex structures having acquired the knowledge of building analysis software packages and advanced technologies. (PO1,PO2,PO3. PO7, PO5)
- PSO3: The graduates will be able to work effectively as an individual or in a team exhibit commitment, engage in lifelong learning and continuous improvement for enhancing their professional and personal capabilities. The department aims at creating intellectuals of superior technical caliber and ethical values. (PO8, PO9, PO12)