

Civil Department's Vision, Mission, POEs And POs

Vision:

To be a Civil Engineering programme of the first choice by the aspiring students and prospective employers by implementing world class education practices.

Mission:

To meet the Vision, all stakeholders of this programme are committed towards Outcome Based Education Philosophy by

- 1. Adopting vibrant academic curricula and implementing innovative teaching learning processes.*
- 2. Providing opportunities to the students for the development of professional skills.*
- 3. Nurturing critical thinking and creativity in students.*
- 4. Inculcating in students the life-long learning attitude and sensitivity towards society & environment.*

Objectives:

- To achieve high level of technical expertise to understand, identify, formulate, design and implement a real life Civil Engineering problem.
- To inculcate the leadership and ethical qualities in implementing the projects.
- To produce technically competent and ethically sound engineering graduates.
- To satisfy the requirement of society through active participation in infrastructural development.
- To prepare the students towards competitive examinations, research and higher education.
- To induce qualities of life-long learning, working in teams with effective communication skills and interaction with society.

Objectives:

PEO1	Demonstrate technical competency by applying knowledge to solve problems related to engineering issues
PEO2	Exhibit skills and appropriate attitude to succeed in their professional career.
PEO3	Display thirst for emerging technologies and quest for innovation with concern to society and environment.

Programme Outcomes:

**Department of Civil Engineering
PROGRAM OUTCOMES**

Engineering Graduates will be able to:

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **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.
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 the public health and safety, and the cultural, societal, and environmental considerations.
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 the information to provide valid conclusions.
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.
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.
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.
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.
10. **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.

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.

PSO 1: Propose sustainable solutions by applying technical know-how and managerial skills in planning, design and execution of civil infrastructure.

PSO 2: Perform exceedingly well in academics to pursue higher studies and succeed in civil engineering services examinations.