

DEPARTMENT VISION

Establish an outstanding centre of regional and national reputation for providing quality engineering education to rural Odisha students, excellent research and services for the professional and the community; to produce quality civil engineers and employ continuous quality improvement principles to improve our program and faculty. The department vision is to become a *Center Of Excellence* that displays civil engineers with high technical competencies and promotes high-level research to face current and future challenges. SVSET imparts to produce engineers having professional and leadership qualities with capacity to take up professional and research assignments in Civil Engineering and allied fields that focusses on inter-disciplinary and innovative approach that allows students to compete at the global level.

DEPARTMENT MISSION

- Serve people of Odisha and country by providing a high-quality and comprehensive education.
- Carry out solid base and applied research at state & national levels.
- Educate students who can serve the construction industry of both state & nation.
- Promote quality education, research for both students & development of faculty who can compete at industry & social needs.
- Instill ethical and moral values among students.
- To impart soft skills, leadership qualities and professional ethics among the students to handle projects independently.
- To develop students that can deal with contemporary issues which can cater at social and global levels.

QUALITY POLICY

We Civil Dept. at "Swami Vivekananda Cshool Of Engg. & Tech." shall strive our hard work continuously that will achieve excellence at any stage and to produce the most competent Civil Engineers in different sectors, through innovative teaching methodology which is achieved by dedicated and duty conscious faculty, continuous and consistent update of facility, welfare and improved quality of faculty.



PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1:- Students must demonstrate a solid understanding of analysis, design, laboratory research, and construction aspects of civil engineering infrastructure, along with a strong foundation in maths, basic science, and technical communication.

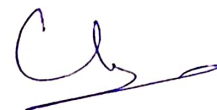
PSO2:- Students will have a broad understanding of different factors like economic, environmental, social, health and safety factors which are involved in infrastructure development, and the ability to demonstrate different function having multidisciplinary teams with competence that can be utilised by modern tools.

PSO3:- Students will be motivated by their continuous self-study and to conduct research work in advanced areas of civil engineering in order to offer engineering services to society, that will be in an ethical and responsible manner.

PROGRAMME EDUCATIONAL OBJECTIVES (PEO) :-

The program educational objectives (PEO) of the civil engineering program are that its graduates could demonstrate the following essential components of a successful engineer and/or consultant within two to four years after the graduation.

1. To train the students so that they can work and contribute to the infrastructure development projects being undertaken by Govt. and private or any other sector companies.
2. To train students in such a way that they can pursue higher studies so that they can contribute to the teaching profession/ research and development of civil engineering and other allied fields.
3. To train students in a manner that they should function effectively in the multicultural and multidisciplinary groups for the sustainable development and growth of civil engineering projects and profession.



PROGRAM OUTCOMES (POs):

1. Apply the knowledge of mathematics, science, civil engineering fundamentals in the five broad areas of civil engineering namely structures, water resources, geotechnical, transportation and environmental engineering for solution of complex problems in the Civil Engineering.
2. Use first principles of mathematics, physics/chemistry and civil engineering concepts to identify, formulate, research literature and analyse complex engineering problems.
3. Design solutions/processes for problems pertaining to Civil Engineering projects in sub- and super structure construction, water treatment, highway alignment with due consideration for the structural stability and safety, durability with respect to environmental effects, cultural and societal needs of the public.
4. Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data and synthesis of the information for Civil Engineering problems that cannot be solved by straightforward application of theories/knowledge, may not have a unique solution and that may need consideration of requirements not clearly defined, and may require mathematical modelling or use of computational tools.
5. Create, select or apply appropriate IT / Engineering tools, software and techniques in order to manage Civil Engineering projects for planning, analysing, designing and drawing, costing, scheduling; and predicting / modelling with a clear understanding of the limitations of such an attempt.
6. Understand the role and responsibility of a professional Civil Engineer in the societal, health, safety and cultural issues by applying reasoning based on the contextual knowledge and within the legal framework for the welfare of society at large.
7. Understand the impact of the professional civil engineering solutions on the environment and the society and develop necessary knowledge in incorporating sustainability concepts in engineering solutions.
8. Apply humanitarian ethics as well as professional ethics as pertaining to norms of civil engineering practice.
9. Functioning effectively as an individual and applying the principle of 'unity in diversity' with a motivation/spirit of synergy and teamwork.

