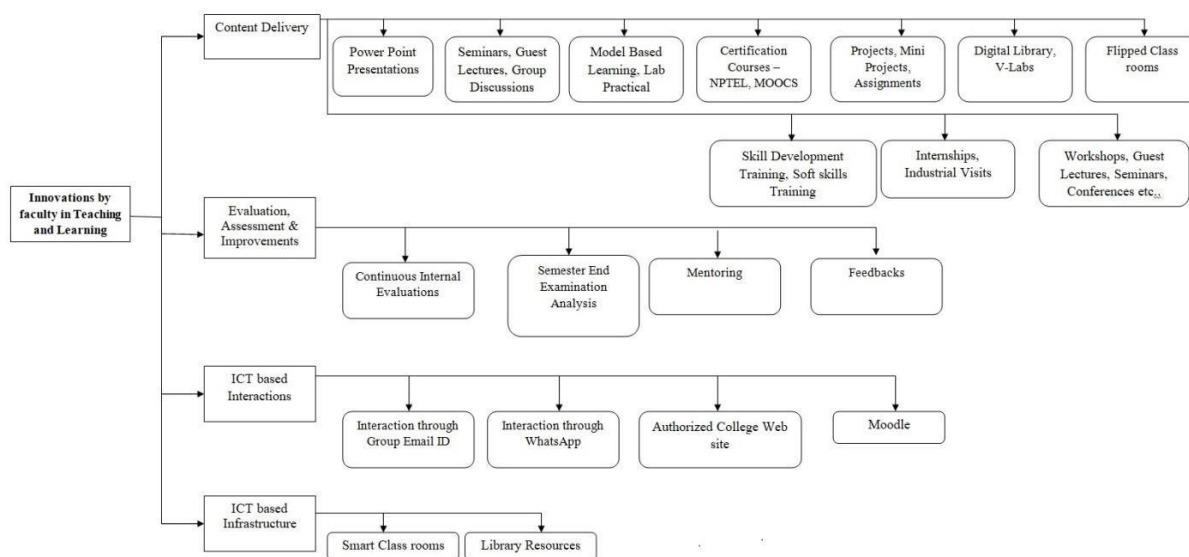




Department of Civil Engineering

TEACHING AND LEARNING PRACTICES

The department has been implementing a variety of innovative approaches to enhance graduates' learning capacities with the ultimate aim of improving student skills.



Goals:

- To be the pacer for the vision of the institute and the program
- To Improve Students' Academic Performance through quality education in accordance with a quality teaching-learning process.
- To create space for encouraging and supporting innovative research and development activities with an ethical mindset.
- To create a bridge between industry and academia in order to better serve the industry and society.
- To continue learning throughout one's life and to take the lead in both their chosen field and extracurricular activities.
- To create graduates, successfully engage with stakeholders and perform quality work using the required tools.
- To instill Positive Action principles into students' cognitive, affective and behavioral learning domains to gain leadership qualities.
- To develop well-rounded students: including physically, intellectually, socially and emotionally
- To create a positive learning environment throughout the Institution
- To impart the knowledge that all of the institute's activities and curriculum are productive.
- To understand research-based theories of learning, education, behavior change and their relationships to Positive Action.

- To develop administrators who use positive approaches to leading and institute management.
- Involves the stakeholders in education by offering support and resources to the institute as well as creating a favorable environment for students.

PRACTICES

- **Laboratory Teaching:** Students are taken to labs and given a live demonstration on a specific topic in order to better understand it.



- **ICT CLASS ROOMS:** Along with blackboard teaching, faculties are using multimedia tools such as PowerPoint presentations and educational videos in the class.



- **Group Discussions:** Involving students as a group on specified topic.



- **Guest Lectures/Seminars/Workshops, Conferences:** Practice of guest lectures are being organized to bridge the gaps in course & research or Industrial needs



- **Skill Development Program:** Practice of SDP's are being organized to bridge the gaps in course & research or Industrial needs



- **Flipped Class Rooms:** The instructor pre-records the lectures, posts the recordings to Canvas for students to watch before class, and then assists the students as they work through assignments during class time.



- **Soft Skills Training:** The training was conducted in a very informal, interesting, and interactive manner, allowing ample opportunity for students to interact with one another.

- **Quiz:** Promoting Self-Improvement of Students by Conducting Quizzes in teams or individuals and also Intended to encourage fun learning while also enhancing the Knowledge.



- **Internships:** Professional learning opportunity that provides relevant, hands-on work pertinent to a student's area of study or career interest.



- **Industrial Visits:** An industrial visit is important in the future of a student seeking a professional degree. It is taught as part of the academic curriculum, most notably in engineering classes. The goal of a workplace tour is to give students an understanding of how companies operate on the inside. We all know that theoretical understanding is insufficient for a successful professional job. Beyond academics, workplace visits give students a real view on the world of work.

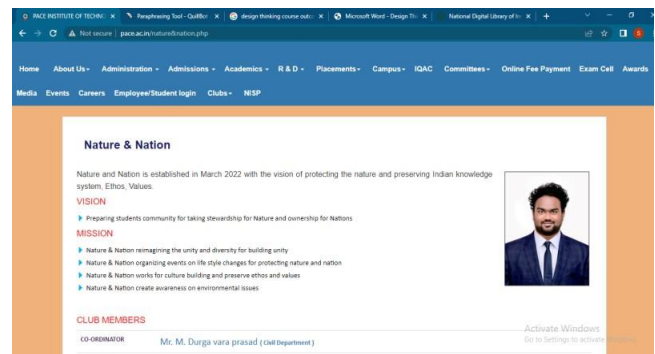


- **Certification Courses:** Helps to boost the efficiency, improves the knowledge & skills, assist in gaining a thorough grasp of the industry, gives the motivation to attempt & succeed in Competitive fields.
- **E-Resources:** Students will be able to Get Knowledge even at remote locations.
- **Design thinking for innovation:** Institution has included the course in the curriculum for enhancing the Creative Problem Solving Skills.

- **Case Study:** Improves the learning capabilities, leadership Qualities, teamwork, practical learning.



- **Club Activities:** Active engaging in the clubs helps to enhance the self-assessment, imports the self- learning capabilities.



RESOURCES:

YouTube: <https://www.youtube.com/channel/UCpPt797LX4G-CTkWrDfsZXQ>

V-labs: <https://www.vlab.co.in/broad-area-civil-engineering>

E-Materials: <http://www.freeengineeringbooks.com/Civil/Civil-Engineering-Ebooks.php>

E-Library: <https://ndl.iitkgp.ac.in/>

Instructional Material:

WORKING MODELS:

The department has been establishing the working models described below on the premises of the institute with funding provided by Srinivasa Educational Society.

1. **Bio gas Plant:** Helps the students to understand the concept of anaerobic digestion Process of Bio waste.



2. **Sewage Treatment Plant:** A 30KLD Sewage Treatment Plant was Installed to treat the sewage generated in institute and helps the students to understand the about sewage treatment



3. **Vermi-composting:** 8' X 6' composting chambers are used to treat organic waste to Manure with the help of warms



- 4. Rain water Harvesting Pit:** 6cum recharge pits constructed to collect the rain water in the institute premises



- 5. RO water Treatment Plant:** 2000 LPH RO Treatment Plant Installed to treat the raw water and also helps the students to get an idea about treatment of Raw water

