# News letter Jan – June 2024

**Civil Engineering Department** 

#### **Program Outcomes**

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.
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**Program Specific Outcomes** 

	1 2	Ability to apply theoretical knowledge for specific field applications: a civil engineering graduate must be able to identify the constraints of a real world
		problem and must be able to decide appropriate combination of technology to resolve the problem. S/he must be able to implement the solution.
	2	Ability to work with advanced equipment: a civil engineering graduate must be able to deal with advanced equipments used for various civil engineering
		applications for faster and precise observations.
3 Awareness about alternative and blended construction materials: natural materials are getting scarce and their over exploitati damages. A civil engineering graduate must be aware about the applications of alternative and blended construction materials w		Awareness about alternative and blended construction materials: natural materials are getting scarce and their over exploitation is causing environmental
		damages. A civil engineering graduate must be aware about the applications of alternative and blended construction materials which are more sustainable.



## Student Placement



## **Research portfolio**

Teaching and Research are Complimentary to each other. Our staff members actively take part in research and publish papers. In the academic year 2023\_24 term II following papers are published:

Name of Author	Title with page nos.	Name of Journal/Publisher	ISSN/ISBN
	Innovative and Parametric Optimization for Photo-Catalytic Process	Indian Society of Techinical Education	0971 - 3034
	Assessment of water quality index for river tapi at shirpur - chopda region and mitigation measures for pollution control, 103 - 107	Indian Society of Techinical Education	0971 - 3034
	Sullage treatment by photo – catalysis	Indian Society of Techinical Education	0971 - 3034
M. Husain	Effect of fire on flexural strength of reinforced concrete beam	Indian Society of Techinical Education	0971 - 3034
w. Husain	Evaluation of WQI for the Tapi River Basin in the Northern Maharashtra Region	Indian Society of Techinical Education	0971 - 3034
	Comparative Study of WQI of the Tapi River Basin in Northern Maharashtra	Indian Society of Techinical Education	0971 - 3034
Dr. S. B. Pawar	Evaluation of WQI for the Tapi River Basin in the Northern Maharashtra Region	Indian Society of Techinical Education	0971 - 3034
	Comparative Study of WQI of the Tapi River Basin in Northern Maharashtra	Indian Society of Techinical Education	0971 - 3034
Dr. P. A. Shirule	Parametric Optimization for photo – catalysis process	Indian Society of Techinical Education	0971 - 3034

#### **Real world Exposure through Site Visit**



TE Civil students are taken to water treatment plant at Waghur (Umala) to see the water treatment Processes.



Students of SE civil visited Ready mix bitumen plant to see the processes of bitumen mix preparation.



Prof Shirule coordinated the visit. Visit went by college bus



Students of BE and TE visited under construction dam site at Nashirabad. Prof F I Chavan, Prof S B Patil and Prof J R Mali coordinated the visit.

### **Real world Exposure through Guest Lectures**



Er Aniket Agrawal Addressed the students. He spoke on key skills in civil engineering. The session was held on  $8^{TH}$  of Feb 2024. It was largely appreciated by students.





Sagar Mitra is a movement started by Prof Bodhankar which is coordinated for Jalgaon by Mr Vinod Sonkul. Basically they conduct sessions to make people aware of plastic waste damages. They counsel the students for plastic waste collection on source and recycling. Many organizations including SSBT COET Bambhori Jalgaon has linkd with it.

## Software Training Session





Civil Engineering Software Academy (CESA) Pune conducted a Course for TE and BE students on ETabs, Studd Pro Rivets etc.

