

# **One Day Concrete Mix Design Workshop in collaboration with The India Cement Ltd.**

**Date :**22 May 2024

**No. of Participants:** 107

The students chapter of IEI, M.G.M.'s College of Engineering Nanded, and the Department of Civil Engineering, in collaboration with The India Cement Ltd., organized a "Workshop on Concrete Mix Design as per IS Code" on 22 May 2024. The event is coordinated by Mr. A.A. Bhore, IEI coordinator, and Dr. A. K. Hashmi, Head of the Department of Civil Engineering. Mr. Ajaynder Singh Mayal, State Technical Head, India Cement, Maharashtra, served as the resource person for this informative program.

The civil engineering students learned the fundamentals of the process of concrete mix design, including understanding proportions of materials like cement, aggregates, and water to achieve the desired strength, durability, and workability. The program included two sessions; the first session included a comprehensive lecture in the Vishveshwarya Conference Hall auditorium on the anatomy of concrete, the properties of constituent concrete materials, the importance of admixtures and moisture correction, and the basics of concrete mix design. The second session includes a hands-on session on concrete mix design aspects where participants gained technical and practical knowledge. This event received an overwhelming response, with around 107 students from UG students registered and actively participated.



## **A Technical Visit to Manar Dam, Nanded**

**Date : 17/02/2024**

The Department of Civil Engineering and Students Chapter Institute of Engineers, India (IEI) has organized a technical visit to Manar Earthen Dam at Barul, Tq.KandharDistNanded, to see the various technical aspects of the dam. The third year civil engineering students observed the structural components of the dam, including spillways, gates, and other works; it helped them understand the principles behind dam design and construction. This hands-on experience supports their academic knowledge and prepares them for future roles in infrastructure development and water resource management.



## A Technical Visit to Kandhar Fort

Date : 17/02/2024

The Department of Civil Engineering and Students Chapter Institute of Engineers, India (IEI) has organized a technical visit to Kandhar Fort. The students examined the structural components of Kandhar Fort, including its bastions, walls, and gateways. The aim of a technical visit to a fort by civil engineering students is to offer insights into historical construction techniques, materials, and structural design practices. The third year civil engineering students observed how structures were built without modern machinery, learning about traditional techniques like stone masonry, arch construction, and the use of local materials.





### **A technical visit to a post-tensioned slab construction site at Nanded.**

**Date: 16 /12/2023**

The aim of a technical visit to a post-tensioned slab construction site by civil engineering students is to provide practical insights into the design, construction, and benefits of post-tensioning in reinforced concrete structures. The final year civil engineering students learned the fundamentals of post-tensioning, including how it differs from traditional reinforced concrete and its advantages in terms of load-bearing capacity and structural efficiency. This visit provided an opportunity to observe the installation of post-tensioning tendons, tensioning procedures, anchorage placements, and grouting processes, giving students a step-by-step view of post-tensioned slab construction.



### **A Technical Visit to a SV Construction Limited site, Nanded**

**Date: 01/12/2023**

The aim of a technical visit to a SV Construction Limited site by civil engineering students is to provide them with real-world exposure to construction practices, project management, and engineering techniques applied in the field. The third year civil engineering students observed various stages of construction, which helps them understand how theoretical concepts are applied in practice.



## **A Technical Visit to Sewage Treatment Plant at Nanded City**

**Date: 20/11/2023**

The aim of a technical visit to a sewage treatment plant by civil engineering students is to provide practical insights into wastewater management and treatment processes, which are crucial for environmental engineering and public health. The third year civil engineering students observed various stages of wastewater treatment, including primary, secondary, and tertiary treatment, gaining insight into how pollutants are removed to produce clean water. The visit provided exposure to essential components such as screens, grit chambers, sedimentation tanks, aeration tanks, and sludge digesters, helping students understand the engineering behind each element.



## **A Technical Visit to Plotting Layout (Kadam Associates) at Loha, Dist: Nanded**

**Date: 23/6/23 Second Year**

The aim of a technical visit to a plotting layout site by civil engineering students is to provide practical exposure to land development and site planning, which are foundational skills in civil engineering. The second year civil engineering students observed the process of marking boundaries, measuring land areas, and dividing plots, giving them insight into surveying techniques and layout planning for residential, commercial, or industrial use. The visit provided exposure to zoning regulations, land use planning, and legal guidelines that influence plot dimensions, access roads, and utility planning, which are critical for compliant site development.



## **A Technical Visit to 3D Printing Machine at JNEC, Aurangabad**

**Date: 14/06/2023**

The aim of a technical visit to a 3D printing machine by civil engineering students is to expose them to cutting-edge technology in construction and explore its applications in modern engineering. The second year civil engineering students gained insight into how 3D printing works, including the layer-by-layer construction process, the types of materials used (such as concrete, polymers, and composites), and the principles behind 3D printing design. Students got exposure to software used in 3D modeling and printing, learning how digital designs are translated into physical structures.



## **A Technical Visit to Chakur- Latur National Highway Project, Latur**

**Date:06 /04/2023**

The aim of a technical visit to a national highway by civil engineering students is to provide hands-on learning and exposure to real-world civil engineering practices in highway construction, maintenance, and management. The second year civil engineering students observed various construction methods used in highway engineering, including road paving, grading, drainage systems, and the use of construction materials. This visit provided Second Year Civil Engineering students with insight into potential career paths in civil engineering, giving them a practical view of work in the field and helping them connect academic theory with professional practice.





## **A Technical Visit to 3D Printing Machine at JNEC, Aurangabad**

**Date: 18/04/2023**

The aim of a technical visit to a 3D printing machine by civil engineering students is to expose them to cutting-edge technology in construction and explore its applications in modern engineering. The third year civil engineering students gained insight into how 3D printing works, including the layer-by-layer construction process, the types of materials used (such as concrete, polymers, and composites), and the principles behind 3D printing design. Students got exposure to software used in 3D modeling and printing, learning how digital designs are translated into physical structures.

