

INDUSTRIAL VISIT TO MANCHANABELE DAM – MANCHANABELE

The Department of Civil Engineering, MVJ College of Engineering organized an industrial visit to the Manchanabele Dam, located near Bangalore, Karnataka, on 26th April 2025. This educational visit was planned for UG 6th Semester and UG 4th Semester Civil Engineering students. The purpose of the visit was to bridge the gap between theoretical knowledge and practical exposure to real-world civil engineering structures, especially focusing on dam construction and management.

Objectives of the Visit

- To provide students firsthand experience on the structural and functional aspects of dam construction.
- To understand the selection criteria for dam site location.
- To study the different components of a dam and their construction techniques.
- To emphasize the role and responsibilities of a civil engineer in the construction and maintenance of critical infrastructures like dams.

About Manchanabele Dam

Manchanabele Dam is constructed across the Arkavathi River, and it primarily serves the dual purpose of domestic water supply and irrigation. The dam also plays an important role in recharging the groundwater table and supports agricultural activities in the surrounding regions. Being a gravity dam, its design involves resisting the horizontal thrust of water mainly through its own weight, a critical concept in dam engineering.

Summary of Activities During the Visit

The students were welcomed and addressed by Mr. Murthy, Executive Engineer at Manchanabele Dam. He shared valuable insights into:

Historical background of the dam and its significance for the local community. Selection Criteria for the dam site, considering geological, hydrological, and topographical factors. Functional Components of the dam such as: Primary Reservoir: Storage of water for various needs. Abutments: The sides of the dam structure that anchor it to the valley walls. Sluice Gates: Mechanisms for controlled release of water from the reservoir.

Students were given a tour around these components, allowing them to observe the engineering details up close. The importance of safety measures, regular maintenance, and sustainable operations of the dam was repeatedly emphasized by Mr. Murthy. The interaction concluded with a detailed discussion where students asked questions related to dam construction, maintenance, sedimentation issues, and environmental concerns.



Industrial Visit: Civil Engineering Students have entered Manchanabele Dam



Industrial Visit: Civil Engineering Students have started exploring the Dam



Industrial Visit: Group Photo at Manchanaabele Dam

EVENT OUTCOME:

Through this industrial visit, students achieved the following outcomes:

1. Application of Theoretical Knowledge: By observing real structures and understanding their working principles.
2. Critical Thinking and Investigation: Understanding complex civil engineering problems associated with dam construction and maintenance (PO 4).
3. Exposure to Modern Tools and Techniques: Learning about current methods in dam monitoring and safety management (PO 5).
4. Encouragement for Lifelong Learning: Enhancing curiosity and motivation to keep updated with new developments in the civil engineering domain (PO 12).

The visit served as a meaningful bridge between academic learning and practical application, inspiring students to pursue excellence in their future professional endeavors.

Conclusion

The industrial visit to Manchanabele Dam was a resounding success, providing students an enriching field exposure and a deeper understanding of dam construction and management. It reinforced the significance of engineering ethics, safety considerations, and sustainable infrastructure development. The Department of Civil Engineering sincerely thanks the management of MVJ College of Engineering for their support in organizing this visit, and expresses gratitude to Mr. Murthy and his team at Manchanabele Dam for their guidance and hospitality.