

L. J. Institute of Engineering & Technology

LJ Campus, Near Sanand Sarkhej Circle, S.G.Highway,
Ahmedabad

Technical Visit Report

Department of Civil Engineering

Date of Visit

(18-01-2025)

Place:

(Garudeshwar & Sardar Sarovar Dam, Narmada, Gujarat)

Duration of Visit

(16 Hours)

BE Semester: V

No. of Students Participant in Visit

One Batch

17 Students

Name of Faculty Members

Contact Number:

1. Mr. Ishan Trivedi

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2. Mr. Hiren Makwana

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INFORMATION ABOUT PLACE:

- **Sardar Sarovar Dam Visit:**

River Power Bed & Hydroelectric Power Generation: The students were granted special access to the River Power Bed, which is essential for the dam's hydroelectric power generation. The tunnel leading to this area is located 20 meters below the riverbed, and it's here that the 6 large turbines generate electricity depending on demand.

Electricity Trading & Plant Load Management: **Mr. M.K. Thakur**, the in-charge at the power plant, explained how the plant operates, including how electricity trading occurs and how the plant manages varying power demand through loading management. This provided the students with insights into the technical and economic aspects of power generation. As there was restriction in photography, technical interaction with Mr. Thakur was not captured.

- **A Frame and Hydrological Understanding:**

At the A Frame located at the top of the dam, the students learned about the hydrological parameters of the river basin. They understood how factors like rainfall, river flow, and water storage affect both the dam's operations and surrounding ecosystems.

The different profiles of the dam were also explained, giving the students an understanding of the engineering challenges and solutions involved in dam design and water regulation.

- **Garudeshwar Visit:**

The students visited Garudeshwar, a sacred site dedicated to Lord Dattatreya, located along the Narmada River. Here, they learned about the weir constructed on the river, which regulates water flow and serves various practical purposes.

They also discussed the impact of flooding caused by the weir, seeing evidence of floodwater marks and riverbank damage. This provided a hands-on understanding of how changes to the river's natural flow can result in environmental challenges, such as soil erosion and damage to local ecosystems.

Remedial Measures: The students were introduced to the measures taken to prevent soil erosion, such as protective barriers and vegetation stabilization, showing the balance between development and environmental conservation.

This visit offered a comprehensive experience that combined engineering, environmental science, and cultural heritage, enriching the students' understanding of sustainable development, hydropower, and river management.

H.O.D.:

Mr. Hiren Makwana

Prepared By:

Mr. Ishan Trivedi

Name of Department: Civil Department							
Sr. No.	Date of visit	Semester	Name of Company/Industry	Address	No. of students participated	No of faculty participated	Remarks
1	18/5/2025	5 th	Jaspur Water Treatment Plant	Ahmedabad	17	2	