



MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE (Deemed to be University)



Affiliated to JNTUA, Ananthapuramu & Approved by AICTE, New Delhi
NAAC Accredited with A+ Grade, NIRF India Rankings 2024 - Band: 201-300 (Engg.)
NBA Accredited - B.Tech. (CIVIL, CSE, ECE, EEE, MECH, CST), MBA & MCA

A Report on Industrial Visit to "Mylavaram Dam and Gandikota Fort" Organized by Department of Civil Engineering Under the aegis of ASCE MITS Student Chapter on 29.09.2026 (Tuesday)



Report Submitted by: **Dr. Ashok Julaganti, Sr. Assistant Professor, Department of Civil Engineering.**

Faculty Coordinators:

1. **Dr. Ashok Julaganti, Sr. Assistant Professor, Department of Civil Engineering, MITS.**
2. **Dr. Imran Kuttigola, Assistant Professor, Department of Civil Engineering, MITS.**

Faculty Participated:

1. **Dr. Sudheer Kumar Yantrapalli, Associate Professor, Department of Civil Engineering, MITS.**
2. **Dr. Turuganti Venkateswarlu, Assistant Professor, Department of Civil Engineering, MITS.**
3. **Mrs. Kandukuri Anitha, Assistant Professor, Department of Civil Engineering, MITS.**

Time: 7:00 AM to 11:30 PM

Attendees Count: 108 students.

Venue: Mylavaram and Gandikota

Mode of Conduct: Offline

Report Received on 08.10.2026.

Objectives of the Site Visit

The objectives of the Site Visit are:

- To understand the planning, construction, and functioning of Mylavaram Dam and its role in irrigation and water resource management.
- To observe major components of the reservoir system, including the dam, spillway, reservoir storage, sluices, canals, and related hydraulic structures.
- To bridge the gap between the classroom concepts of hydraulic engineering, irrigation engineering, and water resources engineering with actual field conditions.
- To study the geological and geographical characteristics of the Gandikota region and understand their influence on engineering structures and settlement development.
- To observe the engineering and architectural features of Gandikota Fort, including its fortifications, gateways, masonry structures, and water-management arrangements.

Site Visit details

The **Department of Civil Engineering**, under the aegis of the **ASCE MITS Student Chapter**, organised a Site Visit to **Mylavaram Dam and Gandikota Fort** at Mylavaram and Gandikota, respectively, on **29 September 2026 (Tuesday)**. The visit was conducted under the guidance of **Dr. Ashok Julaganti, Sr. Assistant Professor**, and **Dr. Imran Kuttigola, Assistant Professor**, Department of Civil Engineering.

The visit was organised to provide students with practical exposure to hydraulic engineering, irrigation engineering, water resources management, geological characteristics, and historical architectural and civil engineering practices. The accompanied faculty coordinators emphasised the importance of field-based learning and encouraged students to relate classroom concepts to actual engineering structures.

During the visit, **Mr. G. Subba Rao, Assistant Executive Engineer (AEE)**, Irrigation Department, explained the planning, importance, and functioning of the Mylavaram Dam. He highlighted that the irrigation system serves as a lifeline to nearly 70,000 acres of agricultural land and around 70 villages, demonstrating its significant role in regional irrigation and water-resource management. The accompanied faculty coordinators explained the major components of the project, including the dam, reservoir, gallery, spillways, intake structure, and sluices, and discussed their functions in regulating and distributing water for irrigation purposes. The observations at the site helped the students bridge the gap between theoretical concepts and their practical application under actual field conditions.



At Gandikota Fort, students observed the geological and geographical characteristics of the region, including the natural rock formations, terrain, and the spectacular gorge landscape. Students also studied the engineering and architectural features of Gandikota Fort, including its massive fortification walls, gateways, masonry structures, and traditional water-management arrangements. The visit provided an opportunity to understand the application of engineering principles in historical construction and the adaptation of structures to the existing terrain and natural resources.

A total of 108 students actively participated in the site visit. The students enthusiastically engaged in field observations and discussions and gained valuable first-hand knowledge of dam and reservoir systems, hydraulic structures, irrigation practices, geological characteristics, historical construction techniques, and traditional water-management systems.

Outcomes of the Event

- Students gained practical exposure to Mylavaram Dam and its major hydraulic structures, including the spillway, intake structure, reservoir, and irrigation system.
- Students understood the role of Mylavaram Dam in irrigation and regional water-resource management, particularly its service to agricultural areas and villages.
- The event enhanced the students' awareness of sustainable water-resource management and preservation of historical engineering structures.
- The visit helped students bridge the gap between theoretical learning and real world civil engineering applications.

Program Outcomes (POs) Covered

- **PO1 – Engineering Knowledge:** Applied civil engineering knowledge related to dams, hydraulic structures, and construction.
- **PO2 – Problem Analysis:** Observed and understood the engineering challenges associated with water management, terrain, and structural systems.
- **PO5 – Modern Tool Usage:** Gained the knowledge to old construction practices, engineering systems, and field-based methods used in infrastructure management.
- **PO7 – Environment and Sustainability:** Recognised the importance of water-resource management, sustainable irrigation practices, and preservation of natural and heritage resources.
- **PO9 – Individual and Team Work:** Enhanced teamwork, communication, and coordination through active participation in the site visit.
- **PO12 – Life-long Learning:** Encouraged continuous learning through field exposure and interaction with real-world civil engineering practices.

SDG Goals Aligned with the Event

- **SDG 4 – Quality Education:** Provided students with practical and experiential learning, connecting the classroom's knowledge to the real life civil engineering structures.
- **SDG 6 – Clean Water and Sanitation:** Enhanced understanding of water storage, irrigation, and sustainable water-resource management.
- **SDG 9 – Industry, Innovation and Infrastructure:** Exposed the students to the engineering hydraulic structures, reservoir, and resilient water infrastructure.
- **SDG 11 – Sustainable Cities and Communities:** Fostered awareness of heritage conservation and the sustainable management of historical structures.

Conclusion:

The site visit to **Mylavaram Dam and Gandikota Fort** provided students with valuable practical exposure to irrigation infrastructure, hydraulic structures, and historical civil engineering practices. Interacting with the Irrigation Department official and observing the dam components helped the students to connect theoretical concepts to real-world applications. The visit to Gandikota Fort further enhanced their understanding of geology, traditional construction techniques, architectural features, and heritage conservation. Overall, the event bridged the gap between classroom learning and real field experience while strengthening students' technical knowledge, field-observation skills, and professional awareness.