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 One day Industry Visit to
"Centre of Excellence Mechanical Engineering, IIT Tirupati"
Organized by Department of Mechanical Engineering
on 06.09.2025



Department of Mechanical Engineering

organizing

Industrial visit to

"Centre of Excellence, Mechanical Engineering IIT Tirupati

DATE: 06-09-2025

Report Submitted by: Mr. Pujari Rajesh, Assistant Professor, Department of Mechanical Engineering; Dr. Rupshree

Ozah, Assistant Professor, Department of Mechanical Engineering.

Company Details: Centre of Excellence, Indian Institute of Technology (IIT) Tirupati, Tirupati

Date & Time of Visit: 06-09-2025, 10:00 AM to 5:00 PM

Participants: 44 III B. Tech. I Semester Mechanical Engineering Students

Report Received on 08.09.2025. Mode of Conduct: Offline

Introduction:

The Department of Mechanical Engineering, MITS deemed to be University, organized an industrial and educational visit to the Indian Institute of Technology (IIT) Tirupati on 6th September 2025. The visit was aimed at providing students with practical exposure to advanced research facilities, laboratories, and innovative technologies in the field of Mechanical Engineering.



Objectives of the Visit:

- 1. To bridge the gap between classroom learning and practical applications.
- 2. To familiarize students with the latest research activities and laboratory practices at IIT Tirupati.
- 3. To motivate students toward higher education, research, and innovation.
- 4. To provide insight into state-of-the-art equipment, processes, and methodologies used in Mechanical Engineering research.

Details of the Visit:

The students, accompanied by two faculty coordinators from the Department of Mechanical Engineering, MITS, reached IIT Tirupati in the morning. They were welcomed by the Dr. Mamilla Ravi Sankar, Prof. & Head, Dr. Muthukumar, faculty and research scholars of the Department of Mechanical Engineering, IIT Tirupati. One hour lecture is given by Dr. Mamilla Ravi Sankar on "Opportunities and Challenges in Mechanical Engineering". 44 students along with 2 faculty coordinators were attended the session. Professor explained the various opportunities like internships, projects, research collaborations etc., for the students.



Post lunch students visited various laboratories including:

- Advanced Manufacturing Laboratory
- 3D Printing and Testing Laboratory
- Thermal and Fluids Laboratory
- Materials Testing and Characterization Lab
- Robotics and Automation Laboratory

Demonstrations were provided on cutting-edge equipment such as CNC machines, 3D printers, heat transfer apparatus, and robotic systems.



Interactive sessions were conducted where students clarified their doubts and explored potential research opportunities.

Learning Outcomes:

- Students gained practical exposure to the application of concepts studied in their curriculum.
- They understood the importance of research, innovation, and interdisciplinary learning.
- The visit enhanced their awareness of advanced technologies, motivating them to pursue higher education and research.
- Interaction with IIT faculty and scholars encouraged students to cultivate critical thinking and innovative problem-solving skills.



Conclusion:

The industrial/educational visit to IIT Tirupati was highly beneficial for the III B. Tech. I Semester Mechanical Engineering students of MITS deemed to be University. It provided them with an invaluable opportunity to learn beyond the classroom and witness real-time applications of engineering concepts. The department extends its gratitude to Dr. Mamilla Ravi Sankar, Prof. & Head, Dr. Muthukumar, faculty and research scholars of the Department of Mechanical Engineering, IIT Tirupati for their support and hospitality in making this visit a successful and enriching experience.