



Param Poojya Dr. Babasaheb Ambedkar Smarak Samiti's

Dr. Ambedkar College

Deeksha Bhoomi, Nagpur



DEPARTMENT OF COMPUTER SCIENCE

Industrial Visit Report

Location: YITM, Ordnance Factory, Nagpur

Date: February 10, 2025

Number of Students : 25

NOTICE

Dr. Ambedkar College
Deekshabhoomi , Nagpur 440010

NOTICE

All the students of M.Sc. Semester – II and Semester - IV from the Department of Computer Science are hereby informed that an Industrial Visit has been organized at YITM, Ambazari on 10th February 2025. Please reach the college at 10:00 am.

The agenda for the visit is as follows

Activity	Time
Arrival	11:30 AM
Campus Team introduction	11:45 AM - 12:00 Noon
About YITM in Brief	12:00 Noon - 12:30 PM
Tour to office	12:30 PM - 01:00 PM
Closing call	01:00 PM

Date: 08/02/2025


Coordinator

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REPORT

Objective: The primary objective of the industrial visit to the YITM, Ordnance Factory in Nagpur was to provide students with practical insights and exposure to various industrial processes and technologies. This visit aimed to bridge the gap between theoretical knowledge and real-world applications.

Itinerary:

1. Arrival and Welcome:

- Students were greeted and given a brief introduction about the YITM, Ordnance Factory, its history, and its significance in the defense manufacturing sector.
- A brief safety orientation was provided to ensure the students' well-being during the visit.

2. Visit to PLC Lab:

- The first stop was the PLC (Programmable Logic Controller) Lab. Here, students were shown various PLC training kits. The lab instructor explained the working principles and applications of PLCs in industrial automation.
- Students had the opportunity to interact with the training kits and understand the programming and operation of PLCs. A demonstration was conducted on how PLCs are used to control machinery and processes.

3. Visit to Electrical Lab:

- The next destination was the Electrical Lab. In this lab, students were introduced to various electrical components and systems, including:
 - **Starters:** Different types of electrical starters used for motor control, including Direct-On-Line (DOL), Star-Delta, and Soft Starters.
 - **Electrical Bench:** A comprehensive setup for electrical experiments and testing. Students could perform hands-on experiments and observe the operation of electrical circuits.
 - **PID Temperature Controller:** Explanation and demonstration of Proportional-Integral-Derivative (PID) controllers used for maintaining desired temperatures in industrial processes. The lab instructor highlighted the importance of PID controllers in ensuring process stability and efficiency.

4. Visit to ITC Lab:

- The final stop was the ITC (Information Technology and Communication) Lab. In this lab, students were introduced to:
 - **Maya OS:** An operating system developed for secure and efficient computing. The features and benefits of Maya OS were explained, emphasizing its use in critical defence applications.
 - **Chakravyu Server:** A robust server designed for handling critical data and ensuring secure communication within the organization. The server's architecture and security features were discussed in detail.

Conclusion: The industrial visit to the YITM, Ordnance Factory in Nagpur was highly informative and educational. Students gained valuable insights into the practical aspects of PLCs, electrical systems, and IT infrastructure. The hands-on experience and interaction with industry experts provided a deeper understanding of the technologies and their applications. This visit has certainly enriched the students' knowledge and will be beneficial for their future academic and professional endeavors.

Feedback:

- Students expressed their appreciation for the opportunity to visit the YITM, Ordnance Factory and learn about the cutting-edge technologies being used in the defense sector.
- The faculty members accompanying the students also found the visit to be well-organized and highly informative.
- Some students suggested that more time be allocated for hands-on activities in the labs to enhance their learning experience.

Acknowledgements: We extend our heartfelt gratitude to the management and staff of the YITM, Ordnance Factory, Nagpur, for their warm hospitality and for providing us with this valuable learning experience. Special thanks to the lab instructors for their detailed explanations and demonstrations.

Event Glimpses



