

POSTER



**Session Details :**

**Title:**Industrial Visit

**Date:** 10.10.2025

**Time:** 09:00 am to 3:00 pm

**Venue:** Chennai Rail Museum, Villivakkam, Chennai

**Activity Category:** Self Driven

**Theme:** INDUSTRIAL VISIT

**Industry Details:**

The industrial visit to the **Chennai Rail Museum**, located in **Perambur, Chennai**, was an educational and informative experience aimed at providing students with practical exposure to the evolution, technology, and heritage of the Indian Railways. The visit was organized by our department to bridge the gap between theoretical knowledge and real-time understanding of railway engineering, transportation systems, and industrial heritage.

The **Chennai Rail Museum** offers valuable insights into the rich history and technological advancements of Indian Railways through its vast collection of vintage locomotives, coaches, signaling equipment, and engineering models. The museum is maintained by the **Integral Coach Factory (ICF)**, one of India's premier coach manufacturing units, which adds immense educational value to the visit.

The visit began with an introductory session by the museum guide, who explained the historical development of Indian Railways, its contribution to industrial growth, and the modernization of railway systems over the years. Students witnessed a wide range of exhibits including **steam engines, diesel locomotives, electric engines, and various types of passenger coaches** that depict the evolution of railway technology in India.

The museum also showcases the **miniature railway track and model trains**, offering a practical understanding of train operation and control mechanisms. Interactive exhibits on **mechanical signaling, braking systems, and track engineering** gave students a better grasp of railway engineering concepts. The visit also included a tour of the **Rail Heritage Gallery**, which displays photographs, models, and components used in early railway operations.

In addition, students explored the **indoor air-conditioned art gallery**, which highlights the artistic, cultural, and technical aspects of railway development. The **toy train ride** within the museum premises provided a live demonstration of small-scale railway functioning, emphasizing mechanical and electrical integration.

Overall, the industrial visit to the **Chennai Rail Museum** helped students understand the practical aspects of railway engineering, maintenance, and design processes. It was an inspiring experience that connected theoretical knowledge with real-world applications, fostering a deeper appreciation for India's engineering and industrial advancements in the transportation sector.

**Designation: Senior Section Engineer**

chennairailmusuem@gmail.com

**Organization: Chennai Rail Museum**

**FACEBOOKLINK:**

<https://www.facebook.com/PrathyushaInstitute/posts/pfbid02dFHPnqRLsp8GvFnWLxfK24MEY6CoqiPFtawaqwazgvJTmcBvDdGqVdbDr71JHj7ql?rdid=TgNpv4FU4EagzvTd#>

**Objective:** The objective of the industrial visit is

The main objective of the industrial visit to the **Chennai Rail Museum** was to provide students with a practical understanding of the **evolution, engineering design, and technological advancements** in the Indian Railways system. The visit aimed to enhance the students' theoretical knowledge of **mechanical systems, transportation engineering, and industrial heritage** through real-time observation and guided learning. It also intended to develop awareness of the **manufacturing, maintenance, and operational processes** involved in railway systems and to inspire interest in engineering applications related to transport and infrastructure.

Specific objectives include:

1. To understand the history and development of the Indian Railways and its engineering innovations.
2. To observe the design, construction, and functioning of different types of locomotives and railway coaches.
3. To gain exposure to real-world applications of **mechanical, electrical, and communication systems** used in railway technology.
4. To relate academic concepts in **engineering design, materials, and systems integration** with industrial practices.
5. To appreciate the role of railways in national industrial growth and sustainable transportation.

Outcomes:

At the end of the visit, students were able to:

1. Gain practical insights into **locomotive design, functioning, and maintenance**.
2. Understand the evolution of **railway technology** from steam to modern electric and diesel engines.
3. Identify the key engineering components involved in **railway track systems, braking mechanisms, and signaling equipment**.
4. Correlate classroom learning with industrial practices in **transportation and mechanical engineering**.
5. Recognize the importance of **safety standards, innovation, and sustainability** in railway systems.
6. Develop an appreciation for India's rich **industrial and engineering heritage** preserved through the Chennai Rail Museum.
7. Enhance their knowledge and curiosity toward careers in **railway design, manufacturing, and infrastructure engineering**.

**Participant details:**

III & IV Year EEE students of Prathyusha Engineering college

**Total no. of Student participation: 36 (III & IV Year EEE)**

**Total no. of Staff (Teaching) participation:01**





**Three to four Photographs/Screenshots that show the participation of students and Staffs(Teaching/Non-teaching)**