

## INDUSTRIAL VISIT TO 400/220kV NELAMANGALA SUBSTATION

The Department of **Electrical and Electronics** organised an Industrial Visit to the **400/220kV Nelamangala Substation in Bangalore** on 29/05/2026 from 8:30 am to 4:30 pm.

### Event Overview

A one-day Industrial Visit to the **400/220kV Nelamangala Substation** was organised by the Department of Electrical and Electronics Engineering on 29<sup>th</sup> May 2026 for 4<sup>th</sup>-semester students. 26 students from the 4<sup>th</sup> semester visited the organisation, accompanied by faculty members Prof. Veena V and Dr. SatishKumar.



**4th-semester students and faculty during the Industrial visit to 400/220kV Nelamangala Substation**

## Objectives of the Event

The primary objectives of the event were:

- To explore the monitoring and control of power flow in the substation.
- To different substation equipment such as power transformers, busbars, isolators, instrument transformers, lighting arresters, earthing equipment, etc.
- To understand the safety measures and maintenance practices followed in high-voltage substations

## Outcomes and Impact:

- Students acquired knowledge about power transmission, distribution systems, and voltage regulation techniques.
- Students gained awareness of maintenance practices and fault-handling methods in substations.
- Students gained better insight into the working environment of the electrical power industry.



**Explanation of the Single Line Diagram of the 400/220kV Substation.**



### **220kV Distribution lines of Substation**

#### **Conclusion**

Overall, the industrial visit to the Nelamangala 400/220 kV Substation provided students with valuable practical exposure to the operation and maintenance of high-voltage power systems. The visit helped in understanding the functioning of various substation equipment, protection systems, and power transmission processes in real-time conditions. Students were able to relate theoretical concepts learned in their academic studies to industrial applications, thereby improving their technical knowledge and practical understanding.

#### **Report by:**

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