

Guest lecture on "Power Electronics and Drives"

The department of **Electrical and Electronics Engineering** conducted a Guest Lecture titled **Power Electronics and Drives** on **30-08-2025** at **10:30 am**, in **Seminar Hall 1**.

The event started at 10:30 am with a welcome speech and guest introduction, followed by the HOD addressing the gathering. Mr. Naveen Kumar E took over the session by giving a detailed information on the introduction of power electronics, semiconductor devices used for controllers. He also explained about basic terminologies of drives and controllers, and about the AC drive features such as low maintenance, acceleration problems, driving in and braking in both directions.

Objectives of the Event

The primary objectives of the event were:

- To give an overview of Power Electronics drives, and their components.
- To discuss control strategies, including pulse width modulation and direct torque control.
- To introduce the applications of electronic drives, including industrial drives.
- To inform the students of the latest trends and advancements in drives.

Event Overview

The event began at 10:30 am with a welcome address by Dr.Vijaykumar Kulkarni, HOD, Dept of Electrical and Electronics, followed by an engaging address by **Mr. Naveen Kumar E, Project Manager ABB**. The presentation covered key areas such as (Electric Drives, Power electronics), providing deep insights into the subject matter. Participants (students) showed keen interest, with active participation during interactive segments and Q&A rounds.





Figure 1: Event Banner Displayed at the Venue

Saturday, August 30, 2025	10:30-10:40 am	Welcome Address
Saturday, August 30, 2025	10:40am - 12:20 pm	Lecture was held
Saturday, August 30, 2025	12:20pm - 12:30pm	QA session

Table 1: Schedule of the Event





(a) Mr. Naveen Kumar explaining about Drives



(b) QA session addressed by speaker



Outcomes and Impact

The students were able to:

- Gain a comprehensive understanding of Power Electronics and its applications.
- Learn about various semiconductor devices and their characteristics
- Awareness of emerging trends in Drives.

Conclusion

The Guest Lecture on "Power Electronics and Drives" was successfully conducted, which provided valuable insights into the industry applications, advanced technologies, and career opportunities to the students.

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