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New Horizon College of Engineering, TEC002 (NHCOE151G)
Student Branch Chapter

Department of Electrical and Electronics Engineering

## Expert Talk

# Advancement in Electric Vehicles with Artificial Intelligence in Automotive Domain

**Mr. Ojaswit Gautam**
Automotive Software Developer
Brigosha Technologies Pvt. Ltd.,
Bangalore

- 31st March 2026
- 09:00 AM - 11:00 AM
- Tejas Seminar Hall
- 6th Semester E.E.E Students (A & B Sections)

Coordinator

**Mr. Vinod Kumar M H**
Senior Associate Professor

Convenor

**Dr. S. Sujitha**
HoD - EEE

**Dr. Revathi V**
Dean - R&D

**Dr. R. J. Anandhi**
Dean - Academics

**Dr. Manjunatha**
Principal

**Title:** Advancement in Electric Vehicles with Artificial Intelligence in Automotive Domain
**Date:** 31-03-2026
**Organised for:** 6th Semester Students of Department of Electrical & Electronics Engineering
**Venue:** Tejas Seminar Hall, New Horizon College of Engineering, Bengaluru
**Resource Person:** Mr. Ojaswit Gautam, Automotive Software Engineer, Brigosha Technology Pvt Ltd Bengaluru.

## 1. Introduction

The Department of Electrical & Electronics Engineering organised an expert lecture on "Advancement in Electric Vehicles with Artificial Intelligence in Automotive Domain" on 31-03-2026 for 6th semester students. The session aimed to provide students with insights into the integration of Artificial Intelligence (AI) in Electric Vehicles (EVs) and how it is transforming the automotive industry. The session also focused on emerging smart mobility solutions, intelligent energy management, and automation in EV systems. The expert shared real-world industry applications and future trends in sustainable transportation.

## 2. Objectives of the Lecture

- To introduce students to Electric Vehicle Technologies and AI integration.
- To understand intelligent battery management and energy optimisation.
- To explore autonomous driving and smart vehicle systems.
- To bridge the gap between academic knowledge and industry advancements.
- To create awareness about sustainable and green transportation technologies.
- To motivate build their career path in EV industry.

## 3. Key Topics Covered

- Fundamentals of Electric Vehicles (EV Architecture)
- Battery Management Systems (BMS) using AI
- Machine Learning in Energy Optimisation
- Autonomous Driving Technologies
- AI-based Predictive Maintenance
- Smart Charging Infrastructure and Grid Integration
- Advanced Driver Assistance Systems (ADAS)

**4. Applications Discussed**

- AI-based route optimisation for energy efficiency.
- Self-driving and autonomous electric vehicles AI models built for locomotive applications.
- Fleet management using AI analytics.
- Predictive fault detection in EV components Live battery life prediction.
- AI model used in Tesla Car for Intelligent driver assistance and traffic management systems.

**5. Event Highlights with Photographs**

- Introduction of the speaker and overview of EV evolution


- Demonstration of AI-driven Electric vehicle simulation models


- Discussion on challenges in EV adoption and AI implementation

## 6. Learning Outcomes

- Students gained knowledge about Electric Vehicle systems and AI integration.
- They understood real-world applications of AI in automotive industries.
- The session enhanced awareness of sustainable mobility solutions.
- Students developed interest in research areas such as autonomous electric vehicle systems and smart transportation.

## 7. Conclusion

The expert talk was highly informative and insightful for the students. It provided a comprehensive understanding of how Artificial Intelligence is revolutionising Electric Vehicles and shaping the future of transportation.