

A Seminar on AI in Automobile

Activity Report

Academic Year	2024-25
Program Driven by	A Seminar on AI in Automobile
Quarter	III
Program / Activity Name	Capacity Building Program
Program Type	
Program Theme	Innovation and startups
Start Date	15-02-2025
End Date	15-02-2025
Duration of the Activity (in Mins)	60
Number of Student Participant	0
Number of Faculty Participant	70
Number of external Participant	--
Expenditure Amount in Rs.	
Any Remark	--
Mode of Session Delivery	Offline
Objective	
Benefit in terms of Learning / Skills / Knowledge obtained	
Feedback	
Video url (mp4)	
Photograph 1 (jpg)	Attached
Photograph 2 (jpg)	Attached
Overall report of the Activity (pdf)	As given below



Dr. P. H. Zope
Convener IIC



Report on Expert Lecture
Title: *AI in Automobile*

Date: 15th February 2025

Venue: MBA AC Seminar Hall

Speaker: Dr. Dipak Talele

Designation: Assistant Professor

Objective:

The objective of this expert lecture was to provide students and faculty with an in-depth understanding of how Artificial Intelligence (AI) is transforming the automobile industry. The session aimed to highlight the applications, benefits, and future prospects of AI in vehicle automation, safety systems, predictive maintenance, and smart manufacturing.

Points Discussed:

1. Autonomous Vehicles:

- Explained how AI enables self-driving cars through the integration of sensor data, GPS, cameras, and machine learning algorithms for real-time navigation, obstacle detection, and decision-making.

2. Advanced Driver-Assistance Systems (ADAS):

- Covered key AI-powered systems including:
 - Automatic Emergency Braking
 - Lane-Keeping Assist
 - Adaptive Cruise Control
 - Parking Assistance
- Emphasized how these systems enhance road safety and driver comfort.

3. Predictive Maintenance:

- Described how AI analyzes performance data to detect mechanical or system faults in advance, reducing breakdowns and maintenance costs.

4. In-Car User Experience:

- Highlighted the role of AI in improving infotainment systems, voice-controlled commands, and personalized vehicle settings that adapt to user habits and preferences.

5. AI in Manufacturing:

- Discussed the integration of AI and robotics in automobile production lines to optimize efficiency, enhance quality control, and reduce human error.

6. Future Outlook:

- Explored how continuous AI innovation is steering the industry toward safer, smarter, and more environmentally friendly mobility solutions.
-

Outcomes:

- Participants developed a foundational understanding of the critical role AI plays across various facets of the automotive industry.
 - Students gained exposure to real-world applications of AI beyond computer science, encouraging interdisciplinary learning and research.
 - Faculty members recognized potential areas for curriculum enrichment and collaborative projects.
 - The session sparked student interest in pursuing careers or higher education focused on AI, automotive technology, and intelligent systems.
-

Remarks:

Dr. Dipak Talele delivered a highly engaging and informative session, simplifying technical concepts for a diverse audience. The presentation was well-structured, enriched with current industry examples and trends. The Q&A session reflected strong engagement from the audience, with many insightful queries related to the future of autonomous vehicles, AI ethics, and automotive job shifts. The session was lauded for its relevance and clarity.

Conclusion:

The lecture successfully fulfilled its objectives by delivering comprehensive insights into the impact of AI in the automobile sector. It broadened the attendees' perspectives on smart mobility and highlighted the growing importance of AI in engineering and industrial innovation. Events like these play a crucial role in preparing students for emerging technological advancements.

