

HOLY GRACE POLYTECHNIC COLLEGE

DEPARTMENT OF AUTOMOBILE ENGINEERING

LEARN | INNOVATE | DRIVE | TRANSFORM

VOLUME

7

ISSUE

1

JUNE 2025

AUTO PULSE

DEPARTMENT NEWS LETTER

*Driving
Knowledge
Towards a
Sustainable
Future*



AUTOMOTIVE
TECHNOLOGY



SUSTAINABLE
MOBILITY



SKILLED
PROFESSIONALS



BRIGHTER
TOMORROWS



VISION

To generate value for students and other stakeholders in Automobile Engineering by consistently working towards the overall development of students, attaining all-round academic excellence, and promoting professional skills, social responsibilities and co-curricular activities.

MISSION

M1: Impart contemporary knowledge and ensure significant engagement in automobile engineering.

M2: Develop industry-ready students by understanding the present needs of the automotive sector.

M3: Promote social responsibility and entrepreneurial skills within the automobile industry.

Message from the Head of Department

Department of Automobile Engineering

Welcoming the New Academic Year

It gives me immense pleasure to welcome all our students, faculty members, and well-wishers to a new academic year in the Department of Automobile Engineering.

Our department remains committed to providing a strong academic foundation combined with hands-on learning, industry interaction, technical activities, projects, workshops, expert sessions, and skill-development programmes. We encourage every student to make the best use of these opportunities and develop into a competent, responsible, and innovative engineering professional. As we begin this new academic year, I urge our students to approach every challenge with curiosity, discipline, teamwork, and confidence. Academic excellence is important, but equally important are professional ethics, communication skills, social responsibility, and a commitment to lifelong learning.

I appreciate the dedicated efforts of our faculty and staff in guiding and supporting our students. Together, let us make this academic year productive, inspiring, and filled with meaningful achievements.

Wishing everyone a successful and rewarding academic year ahead.

Head of Department
Department of Automobile Engineering

AUTONOMOUS NAVIGATION TAKES CENTRE STAGE

State Level Hybrid Webinar • 13 February 2025



INTRODUCTION TO AUTONOMOUS NAVIGATION

The Department of Automobile Engineering featured a State Level Hybrid Webinar on “Introduction to Autonomous Navigation” on 13 February 2025. The programme brought an emerging mobility technology into the academic spotlight and provided a platform for students to engage with a field shaping the future of intelligent vehicles.

RESOURCE PERSON

Mr. Amal Raj K C

Project Lead, C-DAC, Hyderabad

EVENT SNAPSHOT

- Date: 13.02.2025
- Format: State Level Hybrid Webinar
- Theme: Introduction to Autonomous Navigation

WHY IT MATTERS TO AUTOMOBILE STUDENTS

- Autonomous mobility links vehicle engineering with sensing and control.
- The topic complements modern vehicle diagnostics and electronic systems.
- It encourages students to follow emerging automotive technologies.

NEWS REPORT

A FUTURE-READY MOBILITY CONVERSATION

The webinar placed autonomous navigation within the learning environment of automobile engineering. With an expert resource person from C-DAC, Hyderabad, the programme highlighted the value of connecting classroom learning with rapidly developing mobility technologies.

INDIA'S MOBILITY LANDSCAPE •

JANUARY–JUNE 2025

JAN 2025

BHARAT MOBILITY GLOBAL EXPO 2025

The Bharat Mobility Global Expo 2025 brought the mobility value chain together across Bharat Mandapam, Yashobhoomi and India Expo Centre & Mart. The event featured automobiles, components, EVs, batteries, software and other mobility technologies. PIB reported more than 1,500 exhibitors and over 500,000 visitors, while more than 90 launches were recorded during the first two days.

MAR 2025

MARUTI SUZUKI e VITARA ENTERS INDIA'S EV STORY

The Maruti Suzuki e Vitara was scheduled for its Indian launch in March 2025. Autocar India reported two LFP battery options—49kWh and 61kWh—and a claimed 500km MIDC range for the larger battery. The model also featured a Level 2 ADAS suite, making it a useful example of how electrification and intelligent vehicle systems are converging.

APR 2025

ELECTRIC PASSENGER VEHICLE SALES SET A NEW MONTHLY BENCHMARK

Autocar India reported 12,330 electric passenger vehicles sold in April 2025, up 58% year-on-year from April 2024. The report also noted strong growth for several manufacturers, indicating increasing activity in India's electric passenger-vehicle market.

AUTONOMOUS NAVIGATION: THE AUTOMOBILE BECOMES A SYSTEM

A student-friendly overview connected to the February webinar -PRASOB SANKAR E M,LEC. AU



CORE BUILDING BLOCKS

- Sensors — cameras, radar, lidar and ultrasonic sensing.
- Perception — identifying lanes, vehicles, pedestrians and obstacles.
- Localization — determining where the vehicle is on its route.
- Planning — selecting a safe and useful path.

AUTOMOBILE ENGINEERING CONNECTION

- Electronic control units and communication networks.
- Vehicle actuation: steering, braking and propulsion.
- Diagnostics and calibration of electronic systems.
- Safety, testing and validation of intelligent functions.

FROM WEBINAR TO WORKSHOP

For diploma automobile students, autonomous navigation can be approached as a systems-engineering topic: understand the vehicle hardware, study the electronic signals, interpret sensor information, and connect those observations to safe vehicle control.