

2 Days Certificate Programme on

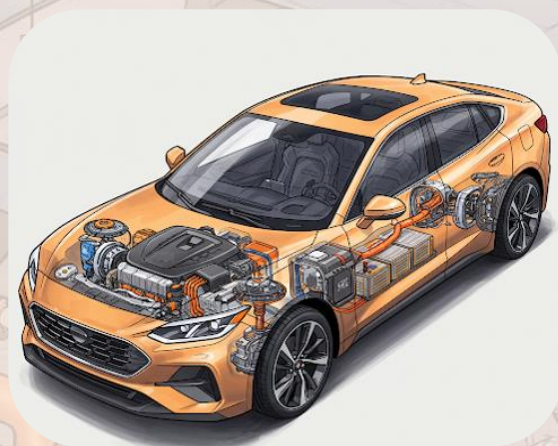
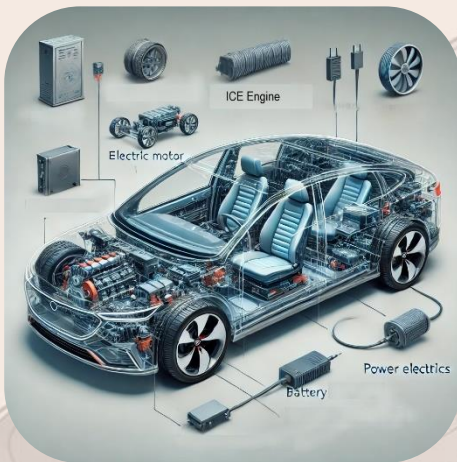
# Hybrid Electric Vehicle



24<sup>th</sup> & 25<sup>th</sup> March 2025



ARAI Academy, Chakan, Pune



## SPEAKERS



**Dr. Sanjay A. Patil,**  
General Manager,  
Academy, ARAI, Pune



**Dr. Kiran P. Wani,**  
Dy. General Manager,  
Academy, ARAI, Pune



**Dr. Yogesh K. Bhatshvar,**  
Dy. General Manager,  
Academy, ARAI, Pune



**Mr. Nilesh A. Sakle**  
Manager,  
Academy, ARAI, Pune



**Mr. Saravanan K**  
Deputy Manager  
Academy, ARAI, Pune

\* Additionally, speakers from ARAI & other Industries may be invited.

Outreach Partner





## 01 OBJECTIVES:

The 2-day Certificate Programme on Hybrid Electric Vehicles (HEV) is a comprehensive, industry-oriented training designed to equip participants with in-depth technical knowledge and practical skills essential for understanding and working with HEV systems. This program provides a structured approach to HEV & EV architecture, covering powertrain configurations, motor and motor drive technologies, transmission systems, energy storage solutions, and energy management strategies to enhance vehicle efficiency and performance. A key focus is simulation & modeling, enabling participants to analyze and optimize HEV designs using computational tools. The program also addresses NVH (Noise, Vibration, and Harshness) challenges, offering insights into techniques that improve vehicle comfort and performance, along with fault detection and diagnosis strategies crucial for maintaining and troubleshooting hybrid vehicle systems. Beyond theoretical sessions, an exclusive lab visit provides exposure to real-world HEV testing and validation processes, ensuring participants can effectively bridge the gap between theoretical concepts and practical applications. By the end of the program, attendees will have gained cutting-edge expertise, positioning them to contribute effectively to the rapidly evolving hybrid and electric vehicle industry.

## 02 SCHEDULE OF THE PROGRAMME:

### Day One: 24<sup>th</sup> March 2025 (Monday)

Start	End	Subject
09:00	09:30	Registration & Breakfast
09:30	10:30	Holistic Overview of Hybrid Electric Vehicles
10:30	11:30	EV & HEV Architecture
11:30	13:00	Motor & Motor Drive for HEVs
13:00	14:00	Lunch Break
14:00	15:00	Transmission Systems for HEV
15:00	16:30	Energy Storage System for HEVs
16:30		Conclusion

### Day Two: 25<sup>th</sup> March 2025 (Tuesday)

09:30	10:30	HEV Testing, & Certification
10:30	11:30	NVH for EV & HEV
11:30	13:00	Simulation & Modeling of HEVs
13:00	14:00	Lunch Break
14:00	15:00	Energy Management Strategies
15:00	16:00	EV/HEV Lab Visit
16:00	16.30	Online MCQ Exam & Feedback

**Note:** ARAI reserves the right to change the dates, contents, schedule, etc. for the programme without any notice.



### 03 REGISTRATION CONTACT:

#### Contact Details

**Phone:** 02135-630795/90 or 02135-396695/90

**Email:** [training.pga@araiindia.com](mailto:training.pga@araiindia.com) ; [patil.pga@araiindia.com](mailto:patil.pga@araiindia.com) ;

**Website:** <https://www.araiindia.com/services/knowledge-dissemination/upskilling-program>

**Office Address:** ARAI Academy, ARAI-FID, B-16/1, MIDC, Chakan, Mahalunge Ingale, Maharashtra 410501

### 04 REGISTRATION FEES:

**Rs.12,000 + 18% GST = Rs. 14,160 per participant**

Limited seats for Faculty/Student with a special discount.

**10% DISCOUNT if 5 or more delegates are registered from the same organization**



For Registration

### 05 PAYMENT INFORMATION:

**Mode of Payment:** Online Transaction

**ARAI Pune Account No:** 04470200000280

**IFSC/RTGS/NEFT Code:** BARB0KARVER (0=Zero)

Note: Participants from organization in SEZ must confirm the applicability for GST before making the payment.

**\*STE- Science, Technology & Engineering**

### Who should attend:

- Automotive professionals
- Automotive Embedded professionals
- Engineering graduates with Automotive / Electronics / Computer Science background
- Engineering /Consulting Companies
- Engineering Students / Professors / PhD Scholars
- Professionals interested in learning about the latest advancements in electronics for smart mobility applications