ARAI ACADEMY
Excellence in Education

2-Day Certificate Programme on

Advanced Motor Control and Intelligent Drive Systems for Electric Vehicles

23 & 24 July 2026

ARAI Academy, Chakan, Pune

SPEAKERS

Dr. Sanjay A. Patil
Sr. General Manager
ARAI, Pune

Dr. Manas R. Sial
Engineer
ARAI, Pune

Dr. Yogesh K. Bhateshvar
Deputy General Manager
ARAI, Pune

Dr. Utsav Sharma
Product Manager
Fluke, India

Dr. Kiran P. Wani
Deputy General Manager
ARAI, Pune

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

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ARAI
Progress through Research

01 OBJECTIVES:

The two-day certificate program on “Advanced Motor Control and Intelligent Drive Systems for Electric Vehicles” is designed to provide participants with technical knowledge and practical exposure to advanced EV drive technologies and intelligent motor control strategies. The program covers EV architecture, Wide Bandgap (SiC & GaN) power converters, vector control, direct torque control, and torque ripple minimization techniques. Participants will also gain insights into digital twin modeling using MATLAB/Simulink, NVH challenges in traction motors, rapid control prototyping, and real-time implementation using HIL platforms. Advanced topics such as sensor fusion, observer-based sensor less control, and fault detection with real-time troubleshooting in motor drives will also be explored. The program includes interactive demonstrations and lab sessions to strengthen practical understanding of modern electric vehicle drive systems.

02 SCHEDULE OF THE PROGRAMME:

Day-1: 23rd July 2026	
	Topics
08:30	Registration & Breakfast
09:30	Evolution of Electric Mobility and EV Architecture
11:00	Wide Bandgap Devices (SiC & GaN) in EV Power Converters
12:00	Vector Control, Direct Torque Control and Torque Ripple Minimization Techniques
13:00	Lunch Break
14:00	Digital Twin Modeling of EV Drive Systems
15:00	NVH Challenges in Traction Motors
16:00	Conclusion
Day-2: 24th July 2026	
09:30	Rapid Control Prototyping and Real-Time Implementation using HIL Platforms
11:00	Sensor Fusion and Observer-Based Sensorless Drive Control
12:00	Fault Detection & Real-Time Troubleshooting in Motor Drives
13:00	Lunch Break
14:00	Visit to COE Green Mobility
16:00	Online MCQ Exam & Feedback

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03 REGISTRATION CONTACT:

Contact Details

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

Email: training.pga@araiindia.com ; patil.pga@araiindia.com

Website: https://www.araiindia.com/services/knowledge-dissemination

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

04 REGISTRATION FEES:

Registration Fees (Rs.)

Rs.12,000 + 18% GST = Rs. 14,160 (Per Participant)

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:

- Organization involved in R & D, Testing.
- Motor Control and Drive Engineers
- Electric Vehicle/Electronic Component Manufactures
- Start-ups working in the field of EV.
- Academicians

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