

राष्ट्रीयइलेक्ट्रॉनिकीएवंसूचनाप्रौद्योगिकीसंस्थान,कालीकट National Institute of Electronics & Information Technology, Calicut



Ministry of Electronics and Information Technology
Government of India

On-line Courses Prospectus

ISO 9001-2015 Certified

Certificate Course in "EV Technology, BMS & Charging Protocols"

Date: 27th January 2026 – 24th February 2026 Time: 4.00PM to 5.30PM theory + Practical

Course Description

This course initiates candidates into the emerging area of Electric Vehicles and helps learn the Basics of Battery driven Electric Vehicle and its Dynamics, Motors, Power Electronics, Batteries, Charging etc. The program consists of instructor led live lecture sessions, demonstrations & hands on sessions based on Matlab.

National Institute of Electronics and Information Technology, Calicut

Who can attend?

Any under graduate/ diploma student/ working professional/ industry people with basic knowledge of Electronics.

- Students pursuing Engineering,
- Professionals working on Electronic /Electric Industry.
- Research students
- Teaching professionals& faculties

Course Content

Session Topic	
Electric Vehicle Fundamentals	
Power, Energy, Torque & Mileage Calculation	
Matlab Fundamentals	
Matlab Simulink basics	
Types of EV configurations & their Characteristics	
Batteries Used in EV	
Different types of battery chemistries	
Battery management system	
Types Motors used in EV	
Regenerative Breaking on Electric Vehicles	
Powertrain & DC-DC convertors in EV	
Solar System Fundamentals	
Solar Charging System for EV	
Charging infrastructure in EV	
Thermal Management system in EV	
Latest Tends and changes in EV Market.	
Setting up Public Charging Station	

Prerequisite

• Knowledge of Basic electronics and Electric Machines

Fee and important dates

Fee	Rs. 4000/- (Including GST)
Last date for registration & payment	26 th January 2026
Sharing of Link / passwords & other details	27 th January 2026

Certificate

Participation certificate will be issued to the candidates only those who have attended at least 60% session, Exit test & submitted the feedback.

Minimum Requirements

- Attendees must have a computer system with a good internet connection.
- PC with Matlab 2019 version installed.
- Link to attend the course will be shared in the registered email on 27-01-2026,2.00pm

Faculty Profile

Qualification and experience of the faculty handling the sessions

1. Manoj Kumar MK – Principal Technical Officer, 30 Years' Experience

Course Coordinator

Manoj Kumar M K

Principal Technical Officer 9447433175(M), 0495 2287266- Exn-225(O)

Email: manojkumar@nielit.gov.in

Terms and Conditions

- 1. In case any registered candidate could not attend the online session due to technical issue at their side there will not be any refund of the course fee and the sessions will not be repeated.
- 2. In case the online course is cancelled /postponed due to some technical issue at NIELIT side and new date is not convenient to the candidate, our liability is limited to the refund of the course fee and NIELIT shall not be responsible for any consequential damages.
- 3. 60% attendance/Exit test and feedback submission are mandatory for awarding the certificate.

For more details about our institution and facilities visit us

Website: http://nielit.gov.in/calicut
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Autonomous Scientific Society of Ministry of Electronics & Information Technology, Govt. of India

NIELIT Calicut

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