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## REGISTRATION

Prospective participants are requested to register for the workshop through the following web link:

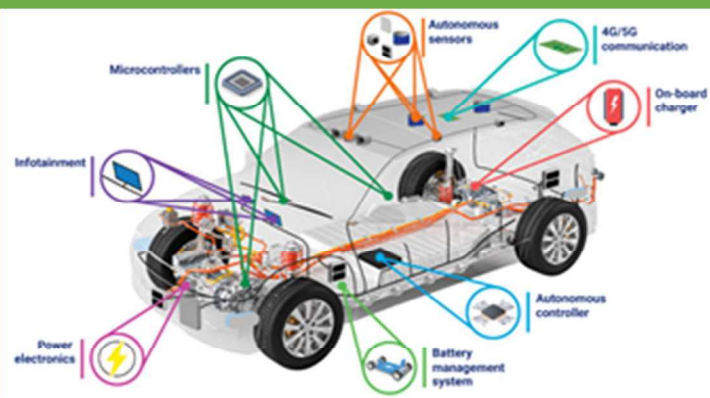
<https://events.vit.ac.in/>

### Registration Fee

For students (UG, PG, Ph.D): Rs. 500 + 18% GST  
Faculty : Rs 1000 + 18% GST

### The main Course Contents:

- ❖ Electric vehicle drive trains
- ❖ Design aspects of Electric vehicle components
- ❖ EV traction motor control strategies
- ❖ Model based design of EV components using MATLAB/SIMULINK
- ❖ Testing of embedded systems of EVs
- ❖ Design of Battery management system
- ❖ Automotive embedded controllers for EVs
- ❖ Embedded controllers and programming



## 5-day online workshop on Embedded systems in Electric Vehicles

11<sup>th</sup> – 15<sup>th</sup> November 2024

Organized by  
Department of Energy & Power Electronics,  
School of Electrical Engineering,  
Vellore Institute of Technology,  
Vellore-632014, Tamilnadu, India

## Vellore Institute of Technology (VIT)

VIT, Vellore was founded in 1984 as Vellore Engineering College by the Founder and Chancellor Dr. G. Viswanathan. University status was conferred in 2001 by MHRD Govt. of India in recognition of its excellence in academics, research and extracurricular initiatives.

VIT has emerged as one of the best institutes of India and is aspiring to become a global leader. Quality in teaching-learning, research and innovation makes VIT unique.

- Engineering and Technology subject areas of VIT are the 240<sup>th</sup> best in the World and the 9<sup>th</sup> best in India, and eight subjects of VIT are within the top 500 in the world (as per QS World University Rankings by Subject 2023).
- The 8<sup>th</sup> best University, the 11<sup>th</sup> best research institution and the 11<sup>th</sup> best engineering institution in India (NIRF Ranking, Govt. of India 2023).
- Ranked among the top 600-800 Universities of the world (THE World University Ranking 2024).
- NAAC Accreditation with A++ grade (3.66 out of 4).
- The 173<sup>rd</sup> best Institution in Asia (QS - Asia University Rankings 2023).

## About the School

The School of Electrical Engineering (SELECT) offers B.Tech. in Electrical and Electronics Engineering, Electronics and Instrumentation Engineering, Electrical and Computer Science Engineering, M.Tech. in Power Electronics and Drives, Control and Automation, Ph.D. and Integrated Ph.D. in Engineering. The programmes are accredited by the Engineering Accreditation Commission of ABET and Institution of Engineering and Technology (IET), U.K. The school played a key role in securing a QS Subject Ranking in Electrical and Electronics Engineering between 201-250 globally and ranking 8<sup>th</sup> in India.



The school has state-of-the-art laboratories in almost all the areas of Electrical, Electronics and Instrumentation Engineering. SELECT has industry sponsored advanced laboratories for performing world class research and consultancy. The school's industry partners Danfoss, Schneider Electric Smart Energy, Schneider Electric Building Automation, Fluke, Q-Max Automated Test Engineering and NXP Semiconductors, India, have established Centre of Excellence for students R&D activities under the guidance of faculty members and industry experts.

The students are encouraged to take advantage of the growing opportunities by incorporating an international internship experience in their final year undergraduate and postgraduate education. Students are also motivated to opt for twin degree programs with various reputed universities across the globe. Every year, students get scholarships to do their final year projects abroad under the Semester Abroad Program (SAP). The school's pre-incubation cell supports product development, patent filing and start-up enthusiasts.

## About the Department

The Department of Energy and Power Electronics provides a platform for the creation and application of power electronics technology in multidisciplinary fields to provide clean and sustainable energy.



The courses are designed to provide well-balanced theory and hands-on training in Power Electronics, drives and controls, Electric Vehicles, Embedded control and more to meet the demand of industries. Through specific courses the graduates are employed in Drives, Embedded, Automobile and pharmaceutical industries in addition to career as a researcher in premiere institutes in India and abroad.

## About the workshop

Lecture series on EV technologies is designed for students, research scholars, and working professionals to enhance their domain knowledge. This lecture series will help the participants to understand the various technologies involved in the complex electric vehicle system like electronic control units (ECUs), electric motors, power electronic converters, battery storage systems, etc. This lecture series will facilitate the participants to choose their career in electric vehicle sector.

## Learning Outcomes

- Understanding of various components of electric vehicles
- Automotive embedded controllers for Electric vehicles