

## ABOUT INSTITUTE:

Established in 2000, the CMR Institute of Technology imparts quality, pragmatic education in engineering and management to help students hone their analytical abilities and develop their creative thinking skills. CMRIT meets the rapidly growing need for technology professionals by nurturing young minds in an innovative and progressive learning environment. Situated in the very heart of South India's IT corridor, the CMRIT campus in Whitefield, Bangalore is centrally located, well connected and easily accessible.

At CMRIT, we are dedicated to holding aloft the flame of Sri Chikka Muniyappa Reddy's dreams. Towards this end, we are committed to promoting technical education as a catalyst to the growth and development of the country and society at large. With world-class infrastructure and experienced faculty, CMR Institute of Technology is the preferred destination for technocrats and managers who wish to shape the future with NAAC A+ Grade.

## ABOUT DEPARTMENT:

The Department of Electrical & Electronics Engineering was started in the academic year 2002-2003. The Department offers an undergraduate programme in the field of Electrical & Electronics Engineering for which the student intake is currently 120. The Department of Electrical & Electronics Engineering is approved by the All India Council for Technical Education (AICTE), and is permanently affiliated to Visvesvaraya Technological University (VTU), Belgaum in Karnataka. The National Board of Accreditation, New Delhi accredits the Department. The Department has established a Research Centre under VTU to facilitate research activities for both faculty and students. Students may also opt to pursue an M.S. through the research programme.

## ORGANIZING COMMITTEE:

### PATRONS:

**Shri.K.C Ramamurthy**

Chairman, CMRGI

**Dr. Sabitha Ramamurthy**

President, CMRJT,

**Shri.K.R. Jayadeep**

CEO, CMRGI

### ADVISORY COMMITTEE:

**Dr.Sanjay Jain,**

Principal, CMRIT

**Dr.B. NarasimhaMurthy,**

Vice-Principal, CMRIT

### CONVENER:

**Dr.K. Chitra,** HOD -EEE, CMRIT

### PROGRAMME COORDINATORS:

**Dr. Viji K**

Associate Professor & DRC-Head, EEE

**Dr. Nageswara Rao A**

Asst. Professor & I&E-Head, EEE

### VENUE:

The Online training will be conducted through **Google Meet**. The online session links will be shared after successful completion of training registration.



**Online LTTP**

**On**

**RECENT TRENDS AND  
CHALLENGES ON INTEGRATION  
OF POWER CONVERTERS WITH  
ELECTRIC VEHICLES**

**(20.02.2023 to 25.02.2023)**



**Organized By**

Department of Electrical and Electronics  
Engineering  
CMR Institute of Technology  
(NAAC A+ Accredited)  
#132, AECS Layout, IT Park Road  
Bengaluru, Karnataka, INDIA-560 037

## COURSE CONTENT:

- **Issues in Integration of EVs with Power System**
- **Recent Trends in Power Electronics Converters for Charging Solutions of Electric Vehicles**
- **Electric Vehicle Charging Technologies and Systems**
- **Electric Vehicle Career Opportunities**
- **Battery Management Systems for EVs**
- **Role of IoT in EVs**

## RESOURCE PEOPLE:

- **Dr. S Jaisiva**, Assistant Professor, M.Kumarasamy College of Engineering, Karur, India.
- **Dr. Viji K**, Associate Professor, CMR Institute of Technology, Bengaluru, India.
- **Dr. Nageswara Rao A**, Assistant Professor, CMR Institute of Technology, Bengaluru, India.
- **Dr. Dhamodhara Reddy**, Associate Professor, Sasi Institute of Technology and Engg. Tadepalligudem.
- **Dr. Shailendra**, Associate Professor, CMR Institute of Technology, Bengaluru, India.
- **Dr. Vikram Kulkarni**, Assistant Professor, Mukesh Patel School of Technology, Maharashtra, India.

## ABOUT Training

In the transportation sector, the EVs act as an emerging approach and an alternative technology, which can alleviate the non-renewable fossil fuel dependency. Lower operating costs, better fuel economy with reduced carbon emissions are the reasons for higher preferences of EVs. Advancements in EV charging technology based on converter topologies contribute towards many significant benefits of EVs over many other traditional clean energy applications. Despite several developments in EV technology, there are still some potential barriers including charging infrastructure, a suitable design of battery chargers (converter topologies), and battery degradation and driving range issues for widespread adoption. This LTTP is mainly focusing on the Design challenges of power electronic converters and its integration to Renewable energy and EVs using MATLAB simulations.

## BENEFITS FOR THE PARTICIPANTS:

Participants can learn different control algorithms to integrate the power converters with renewable sources and Electric Vehicles. Hands-on sessions are helpful to design the power converter systems using MATLAB simulations.

## ELIGIBILITY:

Students, Faculty and Industry persons are eligible for the training.

## IMPORTANT DATES:

Last date for Registration: 18.02.2023  
Registration Fee : Rs.100/Person  
Date and Time: 20.02.2023 to 25.02.2023  
02:00 PM to 04:00 PM

**E-Certificate will be provided to all the Participants after successful completion of the training.**

## ADDRESS FOR COMMUNICATION

Dr.VIJI K,  
Associate Professor & DRC Head,  
Department of EEE,  
CMRIT, Bengaluru-560 037  
Mobile: +91- 9620201874  
Email: [viji.k@cmrit.ac.in](mailto:viji.k@cmrit.ac.in)

Registration Link:

<https://forms.gle/PLZA8SFzZkPijeH9>  
Google Meet joining info Video call link:  
<https://msteams.link/BT7Y>

## Fees Payment Details:

Account Name: CMRIT Principal  
Account Number: 843410110000242  
Bank Name: Bank of India  
Branch: AECS Layout Branch  
IFSC Code: BKID0008434