One Week

# Faculty Development Programme on Modern Power Converters and Optimization Techniques for Electric Vehicles

6<sup>th</sup> to 10<sup>th</sup> February, 2023

### **REGISTRATION FORM**

Name:
Designation:
Department:
College:
Mobile:
Email:
Address for communication

### **DECLARATION**

The information furnished in registration form is true to the best of my knowledge. I agree to abide by the rules and regulations governing by the course. If selected, I shall attend the course for entire duration, I also undertake the responsibility to inform the coordinator sufficiently in advance, in case I am unable to attend the course.

Place: Date:

Signature of Faculty

Signature of Head of the Institution

# **ONLINE Registration Link:**

https://forms.gle/sAFQGFtGtU91fvuw6

Last date for Registration: 4th February, 2023

## **Chief Patron:**

Sri. Ch. Malla Reddy,

Hon'ble Minister, Govt. of Telangana State Founder Chairman, MRGI

### **Patrons:**

Sri Ch. Mahender Reddy, Secretary, MRGI Dr. Ch. Bhadra Reddy, President, MRGI

### **Convener:**

Dr. Y. Madhavee Latha,
Professor of ECE & Principal, MRECW

### **Coordinator:**

Dr. S. Vijaya Madhavi, HOD, Dept. of EEE, MRECW

### **Co-Coordinators:**

Dr. K Chandram,

Professor, Dept. of EEE, MRECW

Cell: 8919360029

Dr. N. Vengadachalam,

Assoc. Prof., Dept. of EEE, MRECW

Cell: 9944950505

# **Organizing Committee:**

Dr. A Ganga Dinesh Kumar, Professor, EEE, MRECW Dr. B Madhusudhna Reddy, Assoc. Prof., EEE, MRECW Mr.N Raveendra, Asst. Prof., EEE, MRECW Mr.V. Brahmam Yadav, Asst. Prof., EEE, MRECW Mr.V. Naresh, Asst. Prof., EEE, MRECW

Mrs.P. Radhika, Asst. Prof., EEE, MRECW

Registration Fee: Rs.500/- per Participant

# FREE REGISTRATION

for participants from Malla Reddy Group of Institutions & Sister concern Institutions (CMR, MLR, St. Martins) One Week
Faculty Development Programme on

Modern Power Converters and Optimization Techniques for Electric Vehicles

6th to 10th February, 2023



Organized by
DEPARTMENT OF
ELECTRICAL AND ELECTRONICS ENGINEERING



# MALLA REDDY ENGINEERING COLLEGE FOR WOMEN

**Autonomous Institution** 

Accredited By NBA & NAAC With 'A' Grade NIRF Indian Ranking, MHRD, Govt. of India

Band-Excellent, National Ranking by ARIIA-2021
Maisammaguda, Dhulapally, Secunderabad-500 100













www.mallareddyecw.com



### **ABOUT MRGI**

Situated away from raucous sounds of Hyderabad city, MRGI epitomizes technocracy at its best. Being one of the largest campuses in Telangana State, MRGI promises eventful student oriented learning. The founder chairman Sri.Ch.MallaReddy began the journey as an educationalist to form the bridge between society, industry and academics. He is an unassuming dynamic leader with a keen interest in changing trends of higher education and student's employability in India & abroad. The diverse and enormous growth of the group unravels his realistic vision to cater to the needs of students in all the areas of education. Education at MRGI brings all round and holistic development in students. Today MRGI has become a major learning centre with 35 institutions offering Engineering, Medical, Management, MCA and Pharmacy courses.

### **ABOUT MRECW**

Malla Reddy Engineering College for Women (Autonomous Institution, UGC, Govt. of India) is approved by AICTE, New Delhi and affiliated to JNT University, Hyderabad. The college has UGC Autonomous Status by Govt. of India, Accredited by NBA, Accredited by NAAC with 'A' grade, Ranked by NIRF Indian Ranking, Accepted by MHRD, Govt. of India, Band-A (6th - 25th) National Ranking by ARIIA, MHRD, Govt. of India, ISO 9001:2015 certified, Affiliated to JNTUH, 2(f) & 12(B) Recognized by UGC, AAAA Rated by Careers 360 Magazine, AAAA+ Rated by Digital Learning Magazine, 51Ranked Nationwide by TIMES News Magazine, Ranked Nationwide Top 132 by India Today, Ranked as Top Engineering Colleges of Eminence in India 2022-CSR Ranking, Platinum Rated by AICTE-CII Industry Linked Institutes Survey, Recipient of College of the Year-2019 Award" from Education Matters, "College of the Year-2017 Award" from Silicon India Education, "Best Engineering College in Telangana & A.P. Award" from International Education Awards, Time Cyber Media Pvt. Ltd., "Education Leadership Award" from Dewang Mehta National Education Awards & "Engineering Educators Award" from University of Bradford, U.K. Top 10 Women Colleges in India-2022 by Women Entrepreneur India Magazine. We organized Seven (7) International Conferences in series from 2014.

### ABOUT EEE DEPARTMENT

The Department of Electrical & Electronics Engineering is accredited by NBA, with an intake of 60 students. The Dept. has state of the art laboratories with latest softwares like MATLAB, ORCAD, SCI LAB, PSPICE and Multisim. We have well qualified faculty members. Several faculty members have received their best teacher awards from institutions of International repute and have been working on research and development projects and regularly publish their work in international journals and conferences. EEE department faculty teams attained patent rights for their technological innovations. The Dept. established IEEE, ISTE student chapters under which it organizes National Level Technical Symposium -FUTURE SASTRA & State Level Technical Symposium-MEDHA every academic year. The Dept. organized National conference on "Emerging Trends in Electrical Systems & Engineering" NCETESE, International Conference on "Emerging Trends in Electrical Systems & Engineering" (ICETESE) every year since 2014.

The Dept. organizes Faculty Development Programmes, Refresher courses and workshops in different streams and Student Development Programmes like Workshops, intra college conferences, Industrial visits , Guest lectures and our students actively participate in hackathon programmes conduct at state and National level. Our students actively participated and won prizes in curricular activities organized by other colleges. The Dept. also organizes regular student seminar sessions of two hours per week for I to IV B.Tech students to enhance their all round performance.

The Dept. also offers value added certification Courses on oxford, Microsoft, CISCO certification through Oxford University, Microsoft Innovation Centre and CISCO Networking Academy respectively. The College Offers Campus Recruitment Training Programmes in collaboration with TIME and FACE Institutions

### **ABOUT FDP**

Applications of power electronics is dominant in the various fields of aerospace, utility systems, telecommunications, industries, domestic, transportation, etc.,. Trends towards renewable energy and electrification of automobiles increase the importance of power electronic technologies. Electric Vehicles (EVs) being the fourth part of industrial revolution, creating more way in the developments in the automobile industry and its applications. EVs completely depend on the power converters for propulsion, charging and other grid interfacing solutions. The objective of the Faculty Development Program is to provide the platform for the upcoming researchers and faculty who are willing to work in the areas of Electric Vehicles, converters in EV's, Battery Charging Systems etc. This FDP will offer a unique opportunity to all the participants in getting awareness in the relevant topics of electrical vehicles.

### Topics to be covered

- Electric Vehicles- Fast Charging stations
- EV integration challenges to power system
- Optimal structured multilevel inverter with intelligent controllers
- Performance enhancement in AC-DC converter for plug in EV charging
- Biologically inspired algorithms and applications for energy management in EVs

#### Hands on sessions on

- Substation Design and Automation
- Al based adaptive control techniques
- Electric Vehicle charging infrastructure design
- Advanced Control Concept Krill Herd Algorithm

### **Expected Outcomes**

- Knowledge Enhancement.
- Hands on practices on Converter models.
- Design aspects of Electric Vehicles
- Finding research problems
- Communication with experts

### **Level of Participants**

Faculty working in AICTE approved Institutes, Ph.D. scholars, and working professionals from various organizations/industries can attend.

### Resource Persons

Subject experts from reputed institutions viz. IIT/NIT/IIITs. Hands-on-sessions with industry experts.

