

About the course:

The course aims to provide opportunities for the faculty members to explore the application of power electronics in renewable energy technologies. As the environment and its sustainability are of a major concern in the current scenario, the incorporation of renewable energy systems is of utmost importance. The course is designed to provide an idea about the various designs, control and applications of power electronics to the off and on grid renewable energy systems.

Course Outcomes:

After the completion of this FDP participants will be able to

- Understand various renewable energy systems and their control techniques.
- Recognize recent developments in design aspects of grid connected inverters.
- Design and analyze on-board power converters for electric vehicle applications.
- Understand grid synchronization techniques for grid connected power converters.

Syllabus:

Overview of renewable power generation systems and their control, role of PWM techniques in grid connected inverters, on-board power converters in electric vehicle power train, grid synchronization techniques for grid-connected power converters, design, control and application of renewable energy systems on off and on grid system.

Resource Persons

1. **Dr. Harish Krishnamoorthy**
Assistant Professor,
University of Houston, USA
2. **Dr. Binoj Kumar**
Professor, Department of EEE,
RIT Kottayam
3. **Dr. Parag Jose**
Department of Electrical Engineering,
Christ University, Bangalore
4. **Dr. Nithin Raj**
Assistant Professor, Department of EEE,
GEC Wayanad
5. **Dr. Manoj Kumar**
Professor, Department of EEE,
GCE Kannur

Organizing Committee

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Patron:

Dr. Benny Joseph, Principal

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One week Online
Faculty Development Programme on
**POWER ELECTRONIC CONTROL
IN RENEWABLE ENERGY
APPLICATIONS**

25th April 2022 - 29th April 2022

Organized by:
DEPARTMENT OF
ELECTRICAL AND ELECTRONICS ENGINEERING

VIMAL JYOTHI ENGINEERING COLLEGE
CHEMPERI, KANNUR, KERALA - 670 632



About the Institution

Vimal Jyothi Engineering College (VJEC) is an educational project of the Archdiocese of Thalassery established in the year 2002 and is managed by Meshar Diocesan Educational Trust. The college is approved by AICTE and affiliated to APJ Abdul Kalam Technological University (KTU). VJEC is a self-financing catholic minority institution aiming at generating fervor for Engineering and Technology in students. Here we inspire, nurture and foster them to realize their career potential in the field of Engineering and Technology. B.Tech Programmes in Computer Science and Engineering, Electrical and Electronics Engineering, Mechanical Engineering, and Civil Engineering, are accredited by the National Board of Accreditation (NBA). The institution is also accredited by NAAC and certified by ISO 9001:2015.

Vision of the Department

To evolve as a centre of excellence, to train students in contemporary technologies, to meet the needs of global industry and to develop them into skillful engineers instilled with human values and professional ethics.

Mission of the Department

To produce competent and disciplined Electrical & Electronics Engineers through delivery of quality education to meet the ongoing global challenges in alignment with technical education system and society.

About the Department

The Department of Electrical and Electronics Engineering was established in the year 2002 and has been imparting quality education. The department is accredited by NBA (National Board of Accreditation). The department offers four year under graduate program in Electrical and Electronics Engineering to cater the ever challenging needs of technical excellence in all areas of Electrical and Electronics Engineering. It has been playing a vital role in producing technologists of higher caliber. Highly dedicated, hardworking, young, dynamic and well qualified faculty members are the main assets of the department. Through selection of technical electives, students will specialize in certain fields of Electrical and Electronics Engineering. These specializations include Advanced Electrical Systems Design, Electrical Power System Design, Electrical Machine Design, Biomedical Instrumentation, Advanced Power Electronics, Advanced Control System, Artificial Intelligence, Power Controllers, HVDC, Hybrid electric vehicles, Robotics etc. More emphasis is given for laboratory experiments and design projects, so the infrastructure and lab facilities are upgraded from time to time and provide adequate opportunities for the students and researchers to learn and to innovate. In order to have nourishment in the knowledge and background in the areas of Electrical and Electronics Engineering, the department regularly organize community development programs, STTPs, FDPs, National and International seminars, workshops, conferences and symposiums in various specialized fields.

INFORMATION FOR PARTICIPANTS

ELIGIBILITY

The FDP is open to faculty members of the AICTE approved institutions, research scholars, PG scholars, participants from Government and Industry.

REGISTRATION DETAILS

All the participants are requested to register online by filling the following form

<http://bit.ly/vjeceeeefdp>

on or before
23rd April, 2022

SCAN ME



Registration for all the participants is mandatory.

- ▶ **ONLINE SESSION DETAILS WILL BE COMMUNICATED TO THE REGISTERED PARTICIPANTS THROUGH EMAIL.**
- ▶ **REGISTRATION IS FREE.**
- ▶ **E-CERTIFICATE WILL BE ISSUED TO THOSE PARTICIPANTS WHO ATTEND ALL THE SESSIONS.**

