



# Velammal College of Engineering & Technology, Madurai–625009

(Autonomous)

## Department of Electrical and Electronics Engineering

Organizing

### *Faculty Development Programme on “Innovations and Challenges in Energy Engineering”*

(11.12.2023 to 16.12.2023)

#### **ABOUT THE INSTITUTION**

Velammal College of Engineering and Technology was established in the year 2007 to impart quality technical education. It is a self-financing non-minority Institution, approved by All India Council for Technical Education (AICTE), New Delhi and affiliated to Anna University, Chennai and is accredited with “A” Grade by NAAC and accredited by NBA for three years. Velammal College of Engineering and Technology, Madurai is conferred with Autonomous status by UGC, for 10 years from 2021-22 onwards. This college is founded by Shri. M.V. Muthuramalingam, Professional Engineer and the Chairman of the Velammal Educational Trust, Chennai and Madurai. Velammal group has 70 Institutions, 1,50,000 students and 15,000 faculty members under its fold. The college has a team of dedicated faculty specialized in various branches of Engineering, Science and Humanities. The Institute offers six U.G Programmes and five P.G Programmes. Four Departments are recognized as Research Center under Anna University, Chennai. The college has a well-established infrastructure with 134 experienced faculty members of which are 55 Doctorates and 36 are pursuing their Ph.D. Research and Development is given much importance in college. The total grant received from funding agencies like DST, DRDO, AICTE, ISRO, MNRE, MSME and BIRAC is Rs.8.26Crores.

#### **VISION AND MISSION OF THE INSTITUTE**

**Vision:** To emerge and sustain as a center of excellence for technical and managerial education upholding social values.

**Mission:** Our Aspirants are

- Imparted with comprehensive, innovative and value-based education.
- Exposed to technical, managerial and soft skill resources with emphasis on research and professionalism.
- Inculcated with the need for a disciplined, happy, married and peaceful life.

#### **ABOUT THE DEPARTMENT**

The Electrical and Electronics Engineering department was started in the year 2007 and it offers B.E. (EEE) and M.E. (Power Systems Engineering) & Ph.D. (Electrical Engineering). The department is recognized as research Centre by Anna University, Chennai from 2014-15 onwards. The department is progressing towards world class excellence through committed teaching and research faculty, Consistent Academic Excellence (95%) in Anna University results, Anna University Rank Holders - 96 (1 Gold Medal). The department has received 1.40crores towards R&D activities from various funding agencies like DRDO, AICTE, DST, EDII, TNSCST,IE(I). Under Innovation and Entrepreneurship Development Centre (IEDC) government sanctioned Rs. 76.2 Lakhs (5 Years Project).

#### **VISION AND MISSION OF THE DEPARTMENT**

**Vision:** To produce quality Electrical Engineers for industry and good citizens for society through excellence in technical education and research

**Mission:**

- To empower graduates with sophisticated knowledge and technical skills.
- To explore, create and develop innovations in Electrical Engineering and Technology.
- To provide beneficial service to the rural, state, national and international communities.

**ABOUT FDP:** Energy engineering is day to day growing research field where more revolutionary ideas and efficient algorithms have been developed over the years. This FDP will provide an opportunity to highlight recent trends and developments in Energy Engineering area. It will further given impetus to the participants towards bringin out newer and efficient techniques in the field of Energy Engineering. Expert invite speakers from both academia and industry with their vast experience in various fields will arouse the participants for the development of Energy Sector, Hands on exercises with MATLAB software will open the door for more research in Energy Engineering.

**ELIGIBILITY TO ATTEND:** The faculty members, Research Scholars and PG students of AICTE approved institutions working in the field of renewable energy sources, renewable energy technology and power engineering are eligible to apply. No Registration Fee.

**ATAL BASIC FDP on “Innovations and Challenges in Energy Engineering” from 11.12.2023 to 16.12.2023**

**Session Details**

Day1	Day2	Day3	Day4	Day5	Day6
9:00-9:30 Inauguration					
9:30-12:00 Session 1- Renewable energy Scenario in India	9:30-12:00 Session 3- Green Hydrogen Energy	9:30-12:00 Session 5- Power the Future with Bioenergy from Organic Wastes	9:30-12:00 Session 7- Wind Energy: Energy Capabilities and Application	9:30-1:00 Industrial Visit	9:30-12:00 Session 10- A Recent Development of Dynamic Tidal Power
12:00-1:00 Article Discussion	12:00-1:00 Article Discussion	12:00-1:00 Article Discussion	12:00-1:00 Article Discussion		12:00-1:00 Article Discussion
1:00-2:00 Lunch	1:00-2:00 Lunch	1:00-2:00 Lunch	1:00-2:00 Lunch	1:00-2:00 Lunch	1:00-2:00 Lunch
2:00-04:30 Session 2-Energy Conservation and Renewable Energy	2:00-04:30 Session 4- Distributed Energy Storage System	2:00-04:30 Session 6- Grid Integration with Advanced Photovoltaic System	2:00-04:30 Session 8- Power Generation from Geothermal Energy	2:00-04:30 Session 9- Research Methodology	2:00-04:30 MCQ feedback and Interactions
4:30-5:30 Practical Session/Labs	4:30-5:30 Practical Session/Labs	4:30-5:30 Practical Session/Labs	4:30-5:30 Practical Session/Labs	4:30-5:30 Practical Session/Labs	4:30-5:30 Valedictory Session

**Convener :** Dr. R. Narmatha Banu

Professor & Head/EEE

**Coordinators :** Dr. S. Chellam,

Assistant Professor/EEE

Mrs.M.Devaki

Assistant Professor/EEE

Mrs.R.Saranya

Assistant Professor/EEE