

## PROFILE OF THE INSTITUTE

Vasavi College of Engineering is established in the year 1981 under the aegis of Vasavi Academy of Education, The college has been granted autonomy by the University Grants Commission, New Delhi and Osmania University, Hyderabad for all the programmes for a period of six years with effect from 2014-15. The college is currently offering 6 UG and 5 PG Programmes. All the six UG programmes are accredited by the NBA. The college has well qualified and experienced faculty.

## ABOUT THE DEPARTMENT

The Department of Electrical and Electronics Engineering was started in the year 1999 offering BE programme in EEE. The Department has started PG programme in Power Systems and Power Electronics from 2012. It has well equipped and laboratories, well qualified experienced faculty with a deep sense of commitment towards the students. The department is a recognized research center under Osmania University.

## ABOUT THIS FDP

Modern power systems are changing fast with Power plants based on Renewable Energy Sources (RES). The Solar PV Power Plant (SPP) and Wind Turbine Generator (WTG) are most widely used for generating power based on RES. These SPPs & WTGs generate power using Power Electronic Power Converters. SPPs are classified as (a) Stand alone type feeding a group of local loads (b) Grid-Tied Type connected only to the Utility Grid (c) Hybrid Type which are connected to a utility grid and in addition they also feed the local loads. Power generated by these SPPs & WTGs is not continuous, due to variations in weather conditions, like sunlight/wind speed/ temperature of the atmosphere. Hence, Battery based Energy Storage Systems (BESS) in combination with Power Electronic Bi-Directional Convertor are being used to mitigate the limitations of discontinuous energy supply from SPPs & WTGs in RES. All these are creating new challenges and opportunities in developing new technologies and operation of the Power systems at various levels.

Many industries and academic institutions are extensively working to solve various issues related to the SPPs/ WTGs/ BESS and Power Electronic Bi-Directional Convertors. Considerable R&D work is in progress and this is results in advanced New Products.

Many of these developed products are already commercially deployed in view of energy efficient and reliable operation.

This FDP is designed to focus on creating know-how/ know-why on various aspects of Power Electronic Power Converters in RES, including issues related to their topology/ interconnection/ grid integration, battery energy storage systems/ Bi-Directional Convertor technologies, local generation and power flow control.

## RESOURCE PERSONS

1. Dr. R.K.Pandey, Director General, NPTI, Faridabad
2. Prof. M.Sydulu, Professor, EED, NIT, Warangal
3. Dr. P.V. Rajgopal, GM (Retd.), BHEL, Corporate R&D
4. Dr. Subramanyam, Ex Deputy Director, CPRI, Bangalore
5. Prof. N.Vishwanathan, Professor, EED, NIT, Warangal
6. Dr. A.Kribakaran, NIT, Warangal
7. Dr. G.Shiva Kumar, NIT, Warangal
8. Dr. P.Chandra Sekhar, Asst.Prof, IIT, Bhubaneswar
9. Dr. B.Malleshham, Professor, OUCE, Hyd
10. Dr. B.Mangu, Professor, OUCE, Hyd
11. Sri. A.Pampapathy, Director, Analogics Tech India.Ltd, Hyd
12. Sri A.Srinivas Nagaraja, Joint Director, M/s Poly Wires and Metals, Hyderabad
13. Sri. A.S. Naidu, GM, M/s Greenko Group, Kurnool
14. Sri.Rachappa, Executive Engineer, TSSPDCL
15. Mr.R.Venkatesh, Protection Engineer, GE, Hyderabad

## TOPICS TO BE COVERED

- Smart Grid and their Implementations
- Application of AI Techniques in smart micro grids.
- Power Electronics Systems and their applications in Renewable Energy based Power Generation
- Solar Power Plants (SPP)/ Installation, Operation & Maintenance for Roof Top Applications.
- Battery Energy Storage Systems for Solar Power Plants.
- Bidirectional power converters for Battery Energy Storage Systems connected to Solar Power Plants Connected to Utility Grids
- Utility Grid Connected Solar Power Plant-System Design, Installation & Operation
- 1 MW Battery Energy storage system for Utility grid
- Energy Management System (EMS) and Its Implementation/ Demonstration
- WTGs & their Power Electronic Converters
- Power evacuation techniques from PV and wind sources
- Simulations of Power Systems and Power Electronic Convertors
- FACTS for Power Transmission Control
- Solar Grid Inverters in smart Grid Environment
- Hands on sessions on smart grid and renewable energy systems by PRDC

## WHO CAN ATTEND?

The FDP is Open to the Faculty Members of AICTE approved Technical Institutions, Research Scholars, PG Students, Working Professionals from R&D organizations & industry.

## REGISTRATION AND FEE PARTICULARS

Number of participants is limited to Forty. The filled in application should reach the Coordinator on or before 30<sup>th</sup> November 2019.

Selected participants will be informed by 2<sup>nd</sup> December 2019.

There is no registration fee for faculty from AICTE approved institutions and Travelling expenses will be reimbursed to outstation participants as per AICTE norms subject to submission of original travel tickets.

Accommodation will be provided to the outstation participants only as per AICTE norms.

Registration for participating in the FDP may be done by sending the application (soft/hard copy) in the prescribed format duly signed by the concerned Head of the institution.

Application forms may be downloaded from the college website: [www.vce.ac.in](http://www.vce.ac.in)

## Registration can be done online at:

[https://docs.google.com/forms/d/1UUFm8dz0KKe2FpMD6yhKwZk7TzxsuXKz\\_QTKtGhCvw/edit](https://docs.google.com/forms/d/1UUFm8dz0KKe2FpMD6yhKwZk7TzxsuXKz_QTKtGhCvw/edit)

Note: Participantss who register online has to bring the hard copy of it with Head of the Institution signature on the first day of FDP for registration.

## IMPORTANT DATES

Submission of Registration Form: 06/12/2019

Intimation of selection to the participants: 07/12/2019

Program dates: 9<sup>th</sup> to 21<sup>st</sup> December 2019

## Filled in application form is to be sent to:

Coordinator, AICTE sponsored FDP on "Recent Advances in Power Systems and Power Electronics Applications in the Environment of Smart Grid and Renewable Energy Systems" EEE Department, Vasavi college of Engineering, Hyderabad-500031, TS

## CONTACT:

Dr.K.Ravi Kumar, 8639517714, 040-23146031/39

Email: [k.ravikumar@staff.vce.ac.in](mailto:k.ravikumar@staff.vce.ac.in),  
[drkadali12345@gmail.com](mailto:drkadali12345@gmail.com)

P.Ravi, 9989600881

Email: [ravi.ponnala237@gmail.com](mailto:ravi.ponnala237@gmail.com)

## REGISTRATION FORM

**AICTE**  
**Sponsored Two Week**  
**Faculty Development Programme (FDP)**  
**on**  
**“Recent Advances in Power Systems and**  
**Power Electronics in the Environment of**  
**Smart Grid and Renewable Energy**  
**Systems”**

1. Name: \_\_\_\_\_

(As to be printed in the Certificate)

2. Designation: \_\_\_\_\_

3. Institute / Organization: \_\_\_\_\_

4. Address for Communication: \_\_\_\_\_

5. E-mail ID: \_\_\_\_\_

6. Telephone /Mobile No: \_\_\_\_\_

7. Participation category: \_\_\_\_\_

(Faculty/Industry/R&D/Research scholar/PG student)

8. Educational Qualification: \_\_\_\_\_

9. Experience( in years): Teaching: \_\_\_\_\_

Research: \_\_\_\_\_ Industry: \_\_\_\_\_

10. Accommodation required: Yes/No

(For outstation participants only)

Date : \_\_\_\_\_ (Signature of Applicant)

### **Recommendation from the Head of the Institution**

Dr./Mr./Ms. \_\_\_\_\_

is an employee/ student of our institute/organization and is here by allowed to participate in the above mentioned FDP

Date: \_\_\_\_\_ Signature

Seal and Signature  
Head of the Institute

### CHIEF PATRONS

Sri. P.Ram Mohan Rao  
President, Vasavi Academy of Education  
Sri. M.Krishna Murthy  
Secretary, Vasavi Academy of Education

### PATRON

Sri. P.Balaji,  
CEO, Vasavi College of Engineering

### CHAIRMAN

Dr. S.V. Ramana, Principal

### CO-CHAIRMAN

Dr. M. Chakravarthy, Professor & HOD-EEE

### ADVISORY COMMITTEE

Dr. M. Sydulu  
Professor, EED, NIT, Warangal  
Dr. P.V. Rajgopal  
Retd. GM, BHEL corporate R&D  
Dr. P.M.Sarma  
Professor, EEE

### PROGRAMME COORDINATOR

Dr. K. Ravi Kumar  
Professor, EEE Department

### COORDINATION COMMITTEE

Dr. Ch.V.S.S.Sailaja, Assoc. Prof.  
Mrs. G.Sandhya Rani, Sr Asst. Prof  
Mr. M. Sreenivasulu, Sr Asst. Prof  
Mr. G. Mahesh, Asst. Prof  
Dr. G.Pranava, Asst. Prof  
Mr. U.Elisha, Asst. Prof  
Mr. N.Uday Kumar, Asst. Prof  
Mr. P.Ravi, Asst. Prof  
Mr. P.Rajasekhar Reddy, Asst. Prof  
Mr. M.Dhanunjaya Rao, Asst. Prof

## **AICTE**

**Sponsored Two Week**  
**Faculty Development Programme (FDP)**  
**on**

**“Recent Advances in Power Systems**  
**and Power Electronics in the**  
**Environment of Smart Grid and**  
**Renewable Energy Systems”**

**9-21, December 2019**



**Organized by**

**Department of**  
**Electrical & Electronics Engineering**  
**Vasavi College of Engineering**  
**(Autonomous)**

(Sponsored by Vasavi Academy of Education Regd.)  
(Approved by AICTE)

(Affiliated to Osmania University)

9-5-81, Ibrahimbagh, Hyderabad-500031.

Phone: +91-40-23146039

Website: <http://www.vce.ac.in>

### **Coordinator**

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**Professor, EEE Department**

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**Mobile: +918639517714**

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