

SPONSORSHIP

For applicants from AICTE approved institutions

Prof./Dr./Mr./Ms. _____ is an employee of our institute and his/her application is hereby sponsored. The applicant will be permitted to attend the short-term course “**Modeling and simulation of hybrid power generation system**” at VSSUT, Burla to be held from 14th-19th December, 2015, if selected.

Date: _____ Signature of sponsoring authority

Official Seal: _____ Designation

The duly completed application should be mailed to:

Prof. P. K. Hota

Dr. B. Mohanty

QIP Short Term Course

Modeling and simulation of hybrid power generation system

Department of Electrical Engineering

Veer Surendra Sai University of Technology, Burla

Sambalpur – 768018, Odisha, India

Tel.: 09437152730/09861056890,

Fax:- 0663-2430204

Email: bmohanty_ee@vssut.ac.in

pkhota_ee@vssut.ac.in

ELIGIBILITY

The course is open to all teachers of degree level technical/engineering colleges/institutions approved by AICTE. No course fee is charged for participants sponsored by AICTE approved institutions. However, a caution deposit of Rs.1000/- has to be sent by the provisionally selected participants, which will be returned when participant joins for the course. The payment is to be made by DD drawn on any Nationalized Bank and in favour of **Coordinator, MSHPGS, payable at Burla.**

FINANCIAL ASSISTANCE

Limited number of participants from the AICTE recognized institutions will be eligible for III AC to and fro railway fare* (via shortest route from the place of work). Only the candidates attending the full course will be eligible for TA and DA.

BOARDING & LODGING

Boarding and lodging facilities shall be provided by the University for the candidates from AICTE approved institutions.

IMPORTANT DATES

The last date for receipt of duly filled applications is **15TH November, 2015**. Intimation of selection of candidature will be communicated through e-mail by **1ST December, 2015**. Final selection notification will be given after receipt of DD and willingness to attend the course.

Interested candidates may send an advance copy of the completed application by fax/email to avoid procedural/postal delay.

Veer Surendra Sai University of Technology Odisha, Burla

Quality Improvement Programme (QIP) Short Term Course on

Modeling and simulation of hybrid power generation system (MSHPGS)

14th- 19th December, 2015

Coordinators

Prof. P.K. Hota

Dr. B. Mohanty



Organized by
**Department of Electrical Engineering
&
Department of Electrical and Electronics
Engineering**
Venue: Golden Jubilee Seminar Hall

SCOPE & OBJECTIVES

The rapid increase in use of nonrenewable energies such as fossil fuel, oil, natural gas has created problems of demand and supply. Because of which, the future of nonrenewable energies is becoming uncertain. The increasing concerns towards global warming and rapidly reducing conventional energy resources have created the need of an alternate energy sources. The important of hybrid systems has grown as they are non-conventional energy sources and they are more energy efficient, decrease the global warming and pollution.

The proposed course is expected to acquaint the participants with the modeling, simulation of different hybrid electric generation systems through emerging control techniques such as to understand the importance of hybrid electric generation systems and to be well conversant with their various configurations in the present energy crisis scenario; to model different hybrid systems and to implement various control strategies under different operating conditions to achieve higher efficiency and to be familiar with different simulation tools for performance analysis of different hybrid systems.

COURSE CONTENT

- **Concept, configuration and advantages of hybrid electric generation systems.**
- **Use of power electronics converters in hybrid electric generation systems.**
- **Modeling of off-grid and on-grid hybrid systems.**
- **Diesel generators and photovoltaic system.**
- **Wind-photovoltaic hybrid system.**
- **Wind–diesel-battery hybrid system**
- **PV-FC hybrid system**
- **Modeling and simulation of photovoltaic/wind/diesel / battery hybrid power generation system.**
- **Different convertors buck, boost and switched mode dc-dc converters**
- **Simple P&O MPPT control technique when the hybrid system is connected to the grid via inverters.**
- **Automatic generation control of hybrid electric generation system.**
- **Simulation tools like MATLAB-SIMULINK, SIMPOWER, PSCAD, etc. for simulating and analyzing the hybrid systems.**

SPEAKERS

The course lectures shall be delivered by the faculty members of VSSUT, Burla and eminent speakers invited from NITs, IITs and other premier institutions of India.

COURSE MATERIALS

Each registered participant will be provided with a set of comprehensive lecture notes.

ABOUT US

Veer Surendra Sai University of Technology (VSSUT) Odisha was formed by Odisha Act 9 of 2009 by upgrading University College of Engineering (UCE), Burla to a non affiliating Unitary State University which came into force from 1st day of July 2009. The University has eleven departments covering all the major engineering, science and humanities disciplines, offering B.Tech., B.Arch., M.Tech., M.Sc. and Ph.D. programmes. VSSUT is located at the foothill of Hirakud Dam – World's longest dam. Burla is known as Intellectual capital of Odisha with VSSUT, Sambalpur University, VSS Institute of Medical Science and Research, Chipilima Agriculture College and Indian Institute of Management – all within a radius of 15 KMs. VSSUT is surrounded by metal and power industries and is referred as Odisha's "Growth Corridor". VSSUT campus is about 10 kms from Sambalpur railway station. Weather in Burla in December will be very pleasant. Light woolen clothes may be required.

Department of Electrical Engineering was established in the year 1956 with a vision to explore new methods of teaching and research. During last 5 decades, this branch has produced high standard and self motivated professionals to serve the humanity both nationally and internationally at par excellence. This short term course is also well supported by Department of Electrical and Electronic Engineering which is recently being established

Veer Surendra Sai University of Technology Odisha, Burla

QIP Short Term Course on

Modeling and simulation of hybrid power generation system (MSHPGS)

14th- 19th December, 2015

Application Form

1. **Name (Block letter):**
2. **Designation & Pay-scale:**
3. **Organization:**
4. **Date of Birth:**
5. **Address for communication:**

Pin Code: Phone:

Fax: E-mail:

6. **Academic Qualification (Please tick)**

(a) B.Tech. (b) M.Tech. (c) Ph.D.

7. **Specialization:**

8. **Experience (in years)**

(a) Teaching (b) Industrial (c) Research

9. **Amount of TA requirement as per entitlement mentioned in the brochure (only for AICTE approved colleges)**

Rs.:

Please register me for the course entitled "**Modeling and simulation of hybrid power generation system(MSHPGS)**" to be held at VSSUT, Burla during 14th-19thDecember, 2015.

Place:

Date:

Signature of the applicant