

National Institute of Technology, Rourkela

Department of Electrical Engineering

Organizes

Short Term Course

on

**Power Electronics, Drives and Power Quality
December 22 – 24, 2014**

Introduction

With fast developments in semiconductor technology, high performance power electronic devices and signal processors are getting commercialized regularly. Consequently power electronics, machine drives and power system technology are advancing very fast. So there is necessity of updating the knowledge with state-of-the-art developments in these fields. This training program will help the participants to update their knowledge.

Course Contents:

Recent trends in Power Electronic devices, high power converters and inverters; PWM converters, space vector PWM, multi-level converters and inverters, matrix converter.

Introduction to ac motor drives, dynamic d-q model of ac machines, control and estimation in induction motor drives, direct and indirect vector control; sensorless vector control, direct torque control, sliding mode control and fuzzy control of induction motor drives, control of synchronous machine. Introduction to solar and wind energy systems.

Power quality, series and shunt compensation, FACTS, STATCOM, DVR, UPFC.

The Institute and Department of Electrical Engineering

NIT Rourkela has made a rapid progress as an Institute of higher learning, in the last decade. Department of Electrical Engineering was established in 1961. Since its inception, the Department is under dynamic progress and is reputed for imparting quality education both at B. Tech, M. Tech levels. The Department currently runs four M. Tech programmes with the specializations in (i) Power Electronics and Drives, (ii) Control and Automation, (iii) Industrial Electronics, (iv) Electronic Systems and Communication. Besides, a good number of research scholars are working towards the PhD degree. The Department has well equipped modern laboratories such as Power Electronics and Drives Lab., Machines Lab, Power System Lab., Control & Robotics Lab., Signal Processing & Communication Lab, Embedded Systems & Real-Time Lab. and Soft Computing Lab. for pursuing research in the emerging areas of Electrical Engineering.

Who should attend

All practicing engineers/technicians working in private, public, government organizations/industries, scientists/engineers from R&D establishments, faculties, research scholars and students from engineering institutions are eligible to apply.

Course Fee

Professionals from Industry: Rs. 3,000/-

Faculty members, Students/Research Scholars from Academic Institutions: Rs. 2,500/-

The course fee includes course material and working launch.

Mode of Payment

All payments should be made through A/C payee demand draft drawn in favor of “Continuing Education, NIT Rourkela” payable at SBI, NIT campus branch, Rourkela (Code-2109).

Boarding and Lodging

Accommodation on twin share basis can be arranged in the Institute guest house or in students’ hostels on prior request.

Room tariff (may change without notice):

North Block Guest House : Twin sharing per person per day: Rs. 300/-

Students’ Hostel: Approximately Rs. 300/- for the entire stay during course.

Breakfast and dinner can be availed in the guest house/student hostels on payment.

Important Dates

Last date of registration: 16 December 2014

Selection intimation to the applicant: 16 December 2014

Course date: 22nd to 24th December 2014

Program Coordinator

Dr K. B. Mohanty

Associate Professor

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1. Name:
2. Highest qualification:
3. Designation:
4. Organization:
5. Address:

6. Phone/ Mobile (must):
7. E-mail (must):
8. Accommodation required in North Block Guest House: YES / NO
9. Accommodation required in students' hostels: YES/NO

10. Details of registration fee: Amount:

DD No.:

Date:

Date

Signature