Send your Registration Forms

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Dr. P. Parthiban

Digital Controller for Power Electronic Applications Coordinator/STC:

Assistant Professor

Engineering Department of Electrical & Electronics Surathkal, Mangalore-575025 **NTTK**

ABOUT NITK

NITK Surathkal is a premier institution engaged in imparting quality technological education and providing support to research and development activities. NITK is recognized as an institute of national importance by an act of parliament. NITK has carved a niche for itself among the best technical institutes in India. NITK offers 9 UG, 26 PG programs and PhD programs.

DEPARTMENT OF EEE

The Department of Electrical Engineering was established right from the inception of the institute i.e. 1960. The post-graduate programme in Power and Energy Systems was started in the year 1992. Formal research activities leading to a doctoral degree (PhD) were introduced in the year 2003. The department has always exerted the best of its efforts to meet the objective of achieving technical excellence. The department is actively involved in research, development, testing and consultancy activities. There are several full-time PhD scholars pursuing research in the department, in addition to a larger number of parttime registrants. Department has been extending needbased services of testing and consultancy to the industrial sector. Its R & D activities have gained momentum with funding/MoU from governmental agencies/industries.

Coordinators

Dr. A. Karthikeyan, Assistant Professor/EEE Dr. P. Parthiban, Assistant Professor/EEE Dr. R Kalpana, Assistant Professor/EEE NITK, Surathkal, Mangalore-575025 Email: <u>parthiban@nitk.edu.in</u> Mobile no: 09019153775 Five Day Short Term Course on Digital Controller for Power Electronic Applications

> Under the Self-Financed Category

29.10.2018 - 02.11.2018

Organized by

Department of Electrical & Electronics Engineering National Institute of Technology Karnataka, Surathkal, Mangalore - 575 025

In Association with

Pantech ProEd Pvt. Ltd.,



ABOUT THE COURSE

The control aspects in the power electronics is important and as well as intricate by its own manner. Initially development of power electronics took place along with analog domain controllers but over the time as electricity demand rose and interfacing of different power generating systems viz., wind, solar and biogas to the grid requires perfect synchronization and as well as reliable control features. With the advent of smart and intelligent technologies, the usage of digital controllers took quick start and thus opening the new era in the power electronics. To achieve the desired results several digital controllers are available and one such DSP controller is TMS320F28012. It is 32-bit processor with codeefficient proficiency in C, C++, Assembly languages, etc. Features inherent to this controller suffices for current control demand applications ranging from closed loop control of DC-DC converters, DC-AC converters, AC-DC converters, etc.

SCOPE OF THE COURSE

The following topics will be covered:

- Basics of DSP and DSP processor
- Introduction to TMS320F2812 Processor and CCS software -Programming on various modules Timer, UART, ADC, DAC, PWM generation, etc.
- Single Phase Half Wave controller design, Hardware and testing
- Single Phase Full Converter design, Hardware and testing
- Single Phase AC Voltage controller design, Hardware and testing
- Design, fabrication and verification of Inverter Driver

REGISTRATION FEE

The registration fee for

• Students(UG/PG/PhD)/Faculty/ Industry persons - Rs.4500/-

The registration fee includes **power board** (PCB consists of 4 MOSFETs plus Gate Drive circuits) registration kit, lunch and refreshments for five days. Limited accommodation for the participants will be provided in the institute guest house / hostels on request (**chargeable basis**). Normally it will be a twin shared accommodation.

With a view to give individual attention to the participants and to make the program more effective, the number of participants is restricted to about 60.

IMPORTANT DATES

Completed Registration forms accompanied by registration fee (payment details as given below) should reach the coordinator not later than **28th Oct., 2018.**

Online payment details:

NITK Current A/C No.:37772503911 ACCOUNT NAME: NITK SURATHKAL [Mention "DCPE" in the remarks during Online payment without fail] SBI, NITK CAMPUS IFSC: SBIN0002273 MICR: 575002013

The selected candidates will be intimated through e-mail / phone.

REGISTRATION FORM

Five Day Short Term Course on Digital Controller for Power Electronics Applications Organized by EEE Department, NITK Surathkal, Karnataka 29.10.2018 to 02.11.2018

Name:	
Designation:	
Organization:	
Official Address:	
Mobile/Telephone:	
E-mail:	
Accommodation Required:	(Yes / No)

Payment Details

Bank details:

NITK Current A/C No.:37772503911 ACCOUNT NAME: NITK SURATHKAL [Mention "DCPE" in the remarks during Online payment without fail] SBI, NITK CAMPUS IFSC: SBIN0002273 MICR: 575002013

Date:

Signature: _____