## **KURUKSHETRA**

Kurukshetra is popularly known for its historical and religious importance. Here, the battle of Mahabharata was fought, and Lord Shree Krishna delivered the devine message as enshrined in the holy book "Shrimad Bhagwad Gita". It is also known as DHARAMKSHETRA and it attractsdevotees from all corners of world all round the year. Kurukshetra is very well connected by Rail, Delhi-Ambala section, by Road (NH1, connecting Delhi-Chandigarh-Amritsar-Jammu) and by Air (Delhi 160 km and Chandigarh 80km). The NIT Kurukshetra campus is situated about 10 km from Pipli, Bus stand locatedon NH1 and about 4 km from Kurukshetra railway station.

## NATIONAL INSTITUTE OF TECHNOLOGY KURUKSHETRA

NIT Kurukshetra, formerly known as Regional Engineering College, Kurukshetra wasfounded in 1963. It was conferred upon the NIT status, with Deemed University on June 26, 2002. The Institute offers several courses, in various disciplines of B.Tech., M.Tech., MBA and MCA and Ph.D. with an annual intake of about 1500 students. Institute also provides excellent facilities for advanced research in the emerging areas of Engineering, Science, and Technology. The institute has well qualified and dedicated faculty along with supporting staff, laboratories and other infrastructure. The infrastructure is geared to enable the institute to produce technical personnel of high quality.

## ELECTRICAL ENGINEERING DEPARTMENT (EED), NITK

The department offers B.Tech, M.Tech and Ph.D. Degrees. The B.Tech. course in Electrical Engineering provides is run with anumber of electives, which enables the students to specialize in one of the fields i.e. Power Apparatus and Systems; Electronics and Instrumentation; Computer Applications; Information and Control. Presently, the department has three post graduate programs, M.Tech., in Control Systems; Power Systems; Power Electronics and Drives and offers Ph.D. in different areas to keep synergy with the evolving innovations and developments in all disciplines of Electrical Engineering.

## PATRON

Padma Shri Dr.Satish Kumar, Director, NIT Kurukshetra

## **COURSE CONVENOR**

Dr. Ratna Dahiya, Professor and Head, EED, NIT Kurukshetra

## **COURSE COORDINATOR**

Dr. Shashi Bhushan Singh

Dr. M.P.R.Prasad

Dr. Shivam

## **IMPORTANT DATES**

Last date of Registration: May 5, 2019 Notification of Selection: May 10, 2019

## CORRESPONDANCE

Address: APCI-2019,

Electrical Engineering Department, NIT Kurukshetra – 136119, Haryana, India

Email: apci2019@gmail.com

Email: shivam@nitkkr.ac.in sbsingh@nitkkr.ac.in mprprasad@nitkkr.ac.in

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+919729662574, +918950214329, +918950213359



Self Financed Short Term Course On Advances in Process Control & Instrumentation (APCI-2019)

(May 27-31, 2019)



**Organized by** 

Department of Electrical Engineering, National Institute of TechnologyKurukshetra Kurukshetra-136119, Haryana, India

# REGISTRATION FORM Self Financed Short Term Course on Advances in Process Control & Instrumentation

(May 27-31, 2019)

#### Name:

| Title (Dr./Mrs./Ms.):             |
|-----------------------------------|
| Sex (M/F):                        |
| Date of Birth: (dd/mm/yyyy)       |
| Designation:                      |
| Organization:                     |
| Address for correspondence:       |
|                                   |
|                                   |
| Phone:                            |
| E-mail:                           |
| Qualification:                    |
| Category of Registration:         |
| Accommodation required*: Yes / No |
| Payment details:                  |

#### Payment details:

| Draft/Online Details |         |
|----------------------|---------|
| Date:                |         |
| Issuing Bank:        | Amount: |

Signature of applicant(with date)

## **Sponsoring Authority:**

| Name:         | A CONTRACTOR OF A CONTRACT |
|---------------|----------------------------|
| Organization: | THE REPORT                 |
| Recommended:  |                            |
|               |                            |

| (Signature    | of        | Head            | of         |  |
|---------------|-----------|-----------------|------------|--|
| Department/Se | ction/Sch | ool/Institute w | vith Seal) |  |

### **COURSE OBJECTIVES**

This workshop covers all the essentials of process control including the ability to perform effective loop tuning. Process control is aimed at engineers who wish to have a clear, practical understanding of the essentials of process control, as well as how to optimize the operation of their particular plant or process. Attendees would get benefit and exposure in the design, implementation and upgrading of industrial control systems. Mathematical theory has been kept to a minimum with the emphasis throughout on practical applications and useful information. Measurements have got to be one of the most important equipment in any processing plant. Any decision made on what the plant should do is based on what the measurements tell us. In the context of process control, all controller decisions are similarly based on measurements. With the advent of computers, it is now possible to do inferential measurements, meaning telling the value of a parameter without actually measuring it physically. It should however, be remembered that inferential measurement algorithms are also based on physical measurements. Therefore, rather than rendering measurements redundant, they have made measurements all the more important. The main theme of this course is to get exposure and hands on experience with Real time Computer based control systems, Lab View, MATLAB etc, This course will be helpful to post graduate students, research scholars, and faculty members. It is an interdisciplinary course; participants from the following background such as Electrical, Electronics, Instrumentation, Mechanical, and Chemical Engineering are encouraged to attend. Participants from the areas of Mathematics and Physics may also attend this course.

## **COURSE CONTENTS**

The course aims to discuss the following facts/challenges to accomplish the aforesaid objectives, but not limited to them.

- Introduction to Process Control and Instrumentation
- Power Plant Instrumentation
- Sensor Technology

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- Robotics Technology
- Boimedical Instrumentation

- Embedded System Application in Instrumenation and Control
- Intelligent System & Control in RES.
- Artificial and Machine Learning Technique in Instrumentation and Control.
- Lab session on LabView, Opal-RT, Dspace, and MATLAB for Instrumentation and Control.

### WHO SHOULD ATTEND?

Faculty members/ research scholars/ students from academic institutes approved by the AICTE/UGC/MHRD and Scientists/ Engineers working in Private/ Public/ Govt. organizations/ industries etc. can attend the course. The application should be made on the registration form and should accompany registration fee as below:

| Participant's category           | Registration fee*<br>(in Indian Rupees) |
|----------------------------------|---|
| UG/PG Students&Research Scholars | 1000/-                                  |
| Faculty Members                  | 2500/-                                  |
| Industry Personnel               | 3000/-                                  |

### \* Registration fee is non-refundable

Participants will be provided meals and tea during the sessions. However, limited accommodation is available in the hostel/ guest house. The accommodation can be arranged on the request of the participants on payment basis, separately. No TA/ DA will be paid to the participants. Participants will be selected on first-come-first served basis. The registration form, complete in all respects, duly forwarded by the Head of the Department/School/Institute, accompanied by Demand Draft/Online details of therequisite amount should reach on or before **May 5, 2019**. For more details please refer to the important details section.

Registration fee is to be paid in advance through a bank demand draft in favor of "Director, NIT Kurukshetra" payable at SBI, NIT Kurukshetra or online through SBI Collect.

The brochure with registration form can be downloaded from Institute website **www.nitkkr.ac.in**. The hard copy of the completed application forms should be sent at the correspondence address and the soft copy to the e-mail address.