KURUKSHETRA

Kurukshetra is described as DHARAMKSHETRA, with historical and religious importance. Here, the battle of Mahabharata was fought, and Lord Shree Krishna preached the philosophy of "KARMA" as enshrined in the holy book "Shrimad Bhagwad Gita." It is one of the premier pilgrimage center attracting devotees 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 80 km). The NIT Kurukshetra campus is situated about 10 km from Pipli, Bus stand located on NH1 and about 4 km from Kurukshetra railway station.

NATIONAL INSTITUTE OF TECHNOLOGY KURUKSHETRA

NIT Kurukshetra, formerly known as Regional Engineering College, Kurukshetra was founded 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 a number 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

CO-PATRON

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

COURSE COORDINATORS

Dr. Bhanu Pratap,
Dr. Shashi Bhushan Singh,
Dr. Pradeep Kumar

ORGANIZING COMMITTEE

Dr. A. Swarup, Professor, EED, NIT Kurukshetra
Dr. K. S. Sandhu, Professor, EED, NIT Kurukshetra
Dr. L. Dewan, Professor, EED, NIT Kurukshetra
Dr. R. S. Bhatia, Professor, EED, NIT Kurukshetra
Dr. G. L. Pahuja, Professor, EED, NIT Kurukshetra
Dr. R. Dahiya, Professor, EED, NIT Kurukshetra
Dr. L. M. Saini, Professor, EED, NIT Kurukshetra
Dr. A. Kumar, Professor, EED, NIT Kurukshetra
Dr. J. Ohri, Professor, EED, NIT Kurukshetra
Dr. J. S. Lather, Professor, EED, NIT Kurukshetra
Dr. Sathans, Professor, EED, NIT Kurukshetra
Dr. Yashpal, Professor, EED, NIT Kurukshetra

IMPORTANT DATES

Last date of Registration: ~~Nov. 30, 2017~~ **Dec. 08, 2017**
Notification of Selection: ~~Dec. 02, 2017~~ **Dec. 10, 2017**

CORRESPONDANCE

Address: **AMCRES-2017,**

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

Email: **amcres2017@gmail.com**

Phones:
+919468034271, +918950214329, +919466369082

Self Financed

Short Term Course

On

Advances in Modelling & Control of Renewable Energy Systems

(AMCRES-2017)

(December 11-16, 2017)

Organized by

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

REGISTRATION FORM

Self Financed Short Term Course on Advances in Modelling & Control of Renewable Energy Systems (December, 11-16, 2017)

Name: _____

Title (Dr./Mr./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:

Draft/Online Details_____

Date: _____

Issuing Bank: _____ Amount: _____

Signature of applicant (with date)

Sponsoring Authority:

Name: _____

Organization: _____

Recommended: _____

(Signature of Head of the Department / Section / School / Institute with Seal)

COURSE OBJECTIVES

Electricity has become an integral part of human life, affecting all the spheres of human life. The electrical power is delivered to the doorsteps of the consumers through the power system. Conventionally, the power system connects the electrical generators located in far locations to the consumer's location, which makes it a complex network. But, recent advances in the areas of renewable energy sources (RES) have led to increased complexity of the network. Now, the function of electricity generation is also performed at the consumer's end. Thus, it makes the power flow bidirectional in nature. This solves several energy issues related to electrical systems. However, it creates several other operational issues with the power system. The major problems being faced are the balance between the generations between the consumption in the power systems, protection of the equipment and devices, control of power flow between different types of equipment, etc. This course aims at providing the participants with these basic issues and the methods to solve them. The problems will be addressed mathematically to help them model and perform different analysis on the subject interest of the participants to enable them with the different research issues and techniques to the participants.

COURSE CONTENTS

The course aims to address the following issues related to the modern power systems, but not limited to them.

- **Introduction to Renewable Energy Systems**
- **Modeling of Different Energy Systems Components**
- **Power Flow Control in RES**
- **Model Order Reduction of RES**
- **Soft Computing Techniques in RES**
- **Forecasting & its Significance in RES**
- **Control Techniques for Photovoltaic Systems**
- **Intelligent Systems and Control in RES**
- **Field-Programmable Gate Array in RES**
- **Lab session on LABVIEW, MATLAB for Control Applications in RES**

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* (in Indian Rupees)
UG Students (Limited Seats)	1000/-
PG Students / Research Scholars	1200/-
Faculty	2000/-
Industry	5000/-

*** The Registration fee is non-refundable. Participants must have valid ID proof of student/ employee from associated organization.**

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 the requisite amount should reach on or before ~~Nov. 30, 2017~~ **Dec. 08, 2017.** 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 as:**

- **https://www.onlinesbi.com/prelogin/icollecthome.htm**
- **Proceed** (Click Check Box to proceed for payment)
- **State of Corporate/Institution:** Haryana
- **Type of Corporate/Institution:** Educational institutions
- **Educational Institutions Name:** DIRECTOR NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA
- **Select Payment Category:** Registration fee for AMCRES 2017

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: **amcres2017@gmail.com**

REGISTRATION FORM

Self Financed Short Term Course on

Advances in Modelling & Control of Renewable Energy Systems

(December, 11-16, 2017)

Title: (Dr./Mr./Mrs./Ms.) :

Name (in BLOCK LETTER) :

Sex (M/F) :

Date of Birth: (dd/mm/yyyy) :

Designation :

Organization :

Address for correspondence :

Phone :

E-mail :

Qualification :

Category of Registration :

Accommodation required (Y/N) :

Payment details:

Draft/Online Details :

Date :

Issuing Bank :

Amount :

Signature of applicant (with date):

Details of Sponsoring Authority

Name :

Organization :

Recommended :

(Signature of Head of the Department / Section / School / Institute with Seal)