

## ABOUT NIT KURUKSHETRA

National Institute of Technology Kurukshetra is one of the premier NITs designated with the status of “Institute of National Importance” by Ministry of Human Resource and Development. Located in Kurukshetra city and spread over 300 acres of lush green area. This institute was established in the year 1963 as a joint venture of the Government of India and Government of Haryana. The institute was upgraded to a National Institute of Technology with deemed university status in June 2002 and later on declared as Institute of National Importance. The Institute offers technical degrees, aims to set higher standards of academics to become a world class institute.

The Institute offers seven undergraduate courses in: Civil Engineering, Computer Engineering, Electrical, Electronics and Communication Engineering, Information Technology, Mechanical Engineering, and Production & Industrial Engineering disciplines and number of postgraduate courses (Master of Technology /Master in Business Administration /Master in Computer Application) along with research programs in all relevant disciplines. The institute is actively engaged in research, consultancy and developmental activities besides regular teaching.

Kurukshetra is a land of historical and religious importance. The importance of the place is attributed to the fact that the Kurukshetra war of the Mahabharata was fought on this land and the Bhagawad Gita was preached on this land during the war when Lord Krishna found Arjuna in a terrible dilemma. Kurukshetra is a railway junction on the Delhi-Karnal-Ambala section of the Northern Railway. It is about 160 kms. from Delhi. The Institute is about 10 kms. from Pipli, a well-known road junction on the GT road (Grand Trunk, NH-1), and about 5 kms. from Kurukshetra Railway Station.

### CHIEF PATRON

Dr. Satish Kumar  
Director, NIT Kurukshetra

### PATRON

Dr. N. P. Singh  
HEAD OF THE DEPARTMENT

### CONVENER

Prof. Rajoo Pandey

### COURSE COORDINATORS

Dr. Vrinda Gupta and Dr. Arvind Kumar

### CONTACT PERSON

Dr. Arvind Kumar

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Engineering, NIT Kurukshetra

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Brochure is available on institute website  
<http://nitkr.ac.in>

## NATIONAL INSTITUTE OF TECHNOLOGY KURUKSHETRA

Announces

**Faculty  
Development  
Program  
On**

**Recent Advancements in  
Communication and Wireless  
Networks**

**(Dec. 23- Dec. 28, 2019)**



**Organized  
by**

Department of Electronics & Communication  
Engineering

National Institute of Technology  
Kurukshetra-136119, Haryana-India

## COURSE OBJECTIVES

The complexity of wireless communication systems has grown considerably during the past decades. The emergence of a variety of new technologies such as fast and inexpensive hardware for processing of data/information has had significant impact on implementation of communication systems.

The field of Communication and Networks is driving the whole world, in particular, wireless communication and computer technology. To fully explore and utilize the development of wireless systems, this program has been organized. An emphasis will be put on communications technology so that faculty and academic researchers learn about recent advancements in wireless technology and continue to work in this area.

The aim of this course is to provide an in depth exposure to faculty members and research scholars to wireless communication systems and networks. MATLAB based demonstrations will introduce the participants to the tools and techniques available for the above systems.

## COURSE CONTENTS

The following topics will be covered in the STC. There will be theory as well as hands on/ simulation classes.

- Digital Communication: Brief introduction, performance evaluation, channel estimation.
- Spread Spectrum Systems: Generation of PN sequences, simulation of DS & FH SS systems.
- Optical /Wireless Communication.
- Multicarrier Communication: OFDM system, SISO and MIMO systems, performance evaluation.
- Cognitive Radio Networks, Wireless Ad-hoc and

Sensor Networks, Software defined Networks, VANETs and WBANs.

## TARGET AUDIENCE

Engineers from Industry, faculty members and research scholars of Engineering Institutes and Technical Universities.

## SPEAKERS

Speakers from IITs, NITs & other premier institutes across India.

## IMPORTANT DATES

Last date for receiving applications: Dec. 16, 2019

**Last date of Registration: Dec. 16, 2019**

## Registration Fee (Non-refundable):

Rs. 6000/- Industry Persons, Rs. 3000/- Faculty Members, and Rs. 1000/- Research Scholars/ Sudents.

## GENERAL INFORMATION

The participants are requested to bring their Laptops. The participant will not be paid any TA/ DA. Accommodation and meals will be provided in the Institute Hostels/Institute guest house on payment basis. A request for this is to be made in advance.

Registration Fee can be deposited online in favor of **Director, NIT Kurukshetra A/C No. 10116885013, IFSC SBIN0006260, SBI NIT Kurukshetra.**

The registration form complete in all respects and duly forwarded by Head of the Department/Institute accomplished by online details of the requisite amount should reach **on or before 16<sup>th</sup> Dec. 2019** to the course coordinator.

## REGISTRATION FORM

Faculty  
Development  
on  
**Recent Advancements in  
Communication and Wireless  
Networks**

**Dec. 23 – Dec. 28, 2019**

Name .....  
(In block letters)

Designation .....

Institution .....

Academic Qualification .....

Specialization. ....

Mailing Address.....  
.....  
.....

Phone (O, M).....

E-mail .....

### Online registration details:

e-Receipt No. ....

Amount.....

Issuing Bank..... Date.....

Signature of Applicant along with date

Signature of Sponsoring Authority with seal