About Kurukshetra

Kurukshetra is a place of great spiritual significance deeply steeped in history and mythology where Lord Krishna delivered the divine message of "Shrimad Bhagwad Gita". It is one of the premier centre of pilgrimage attracting devotees in a steady stream all-round year. Kurukshetra is very well connected by Rail (Delhi-Karnal-Ambala section), by Road (NH1 which connects Delhi-Chandigarh-Amritsar-Jammu) and by Air (Delhi 160 Km and Chandigarh 80 Km). The NIT Campus is about 10 km from Piplisituated on NH1and about 5 km from Kurukshetra railway station.

About National Institute of Technology Kurukshetra (NITKKR) (Institution of National Importance)

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

About the Electronics and Communication Engineering Department (ECED), NITKKR

The Department offers 4 year B. Tech programs in ECE, IIOT, and Microelectronics & VLSI Engineering with various electives leading to sub-specialization in Communication, VLSI, IoT, Signal and image processing etc. M.Tech. and Ph.D. programs are offered to provide opportunity to the students to do research in various niche areas of ECE stream. Various research projects from MHRD and DRDO are being pursued in the Department. The Department endeavours to provide interdisciplinary support to various engineering streams for exploring various applications of ECE.

Chief Patron
Prof. B V Ramana Reddy, Director, NITKKR

Patron
Prof. Karan Sharma, HOD ECE, NITKKR

Convener(s)
Dr.Gaurav Saini

Course Coordinator(s)
Dr. Dheeraj Kumar Sharma,
Dr. Dharmendra Singh Yadav

Important Dates

Last date of Registration: July 18, 2024

For query, please contact:
dharmendra_singh@nitkkr.ac.in
+91-9425482653, +91-9897715970

**Short Term Course (Online Mode)
On
Recent Advancements in VLSI Design
for IoT Applications (RAVI-2024)
(July 19 - July 23, 2024)**

Department of Electronics and Communication Engineering

National Institute of Technology Kurukshetra-136119, Haryana, India

Course Objectives

VLSI (Very Large Scale Integration) design for IoT (Internet of Things) applications has been evolving rapidly to meet the demands of connected devices with low power consumption with small form factors, and efficient data processing capabilities. IoT devices are often deployed in remote or battery-operated environments, necessitating stringent power constraints. VLSI designers employ a plethora of techniques such as voltage scaling, clock gating, and power gating to achieve ultra-low power consumption without compromising performance. Effective communication is a cornerstone of IoT connectivity, driving the need for energy-efficient transceivers and protocols. In this course, the VLSI Design aspect concerning power and area centric design will be covered in details.

Course Contents

- Basics of MOS Device
- Device Circuit Co-design Principle
- Nano scale device design
- Internet of Things (IoT)
- IIoT
- IoT architectures
- Communication Protocols for IoT systems
- Lightweight Cryptography for IoT
- Recent Trends in VLSI Interconnects
- Low Power VLSI Design

Resource Persons are from IITs, NITs and institute of repute.

Who should attend

Faculty members / research scholars / PG students from academic institutes approved by the AICTE /UGC /MHRD and Scientists / Engineers working in private / Public/ Govt. organisations / industries etc. can attend the course.

S. No.	Participants Category	Course Fee (Rs.)
1.	Research Scholars/Students	500
2.	Faculty members	1000
3.	Industry/R&D/Govt. Org. professionals	2000

Participants will be selected on first-come-first served basis.

How to apply online for registration

Click https://forms.gle/PfLSMt7Tr54gYqz98

Fill the google form and submit the same.
Instructions for registration fee
1. Go to SBI Collect or click on **https://www.onlinesbi.sbi/sbicollect**
2. Select Educational Institution
3. Select Haryana
4. Select Director National Institute of Technology, Kurukshetra
5. Select RAVI-2024
6. Make the payment and collect the receipt

REGISTRATION FORM

Short Term Course (Online Mode) On
Recent Advancements in VLSI Design for IoT Applications (RAVI-2024)
(July 19 - July 23, 2024)

Name: _____

Date of Birth: _____

Designation: _____

Organization: _____

Address for correspondence:

_____

_____

_____

Phone: _____

E-mail: _____

Qualifications: _____

(Signature of applicant)

Signature of Head of Department/School/Institute