Emerging Technologies for 5G Cellular Communication

For Whom

facultymembers in technical universities/institutions who are thinking about introducing undergraduate/postgraduate courses and/or conducting postgraduate research in the communication field and also for high officials who are interested to work with the same in the telecom industry.

14 -17 November 2016

Registration Fee
Tk. 5000 for local participants
US$ 200 for expatriate participants

Accommodation
The participants will be provided with furnished accommodation and food at IUT campus.

Visa Information
Citizens of most countries require valid visa to enter Bangladesh. For details please visit www.mofa.gov.bd/visas-officers

Course Coordinator
Mr. Md. Rezaul Hoque Khan, Assistant Professor, EEE, IUT
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Online Application
Deadline: November 10, 2016
http://iutoic-dhaka.edu/shortcourse.php

Registration
14 November, 2016
@EEE Department, IUT

Tk. 5000 for local participants
US$ 200 for expatriate participants

Bank transfer should be payable to:
Account name: IUT OUTSOURCE
Account no: 4018 772450 430
Swift: ABBLBDDHAB

The short course will be held in the premises of beautiful campus of Islamic University of Technology (IUT) at Board Bazar, Gazipur, Bangladesh, about 13 km north from the international airport of Bangladesh. Additional information about IUT campus is available at the website <www.iutoic-dhaka.edu>.

For More Information:
Islamic University of Technology (IUT)
Board Bazar, Gazipur-1704, Bangladesh
+880-2-9291254 – 59 (Ext. 3351)
http://eee.iutoic-dhaka.edu
rhkhan@iut-dhaka.edu
In this course, we put forth the vision and technical characteristics for 5G (5th generation mobile communication or 5th generation wireless systems) as the convergence of evolved versions of current cellular technologies with other complementary radio access technologies. The focus of this short course is to introduce the participants with various underlying technological requirements for the advancement of 5G.

The course will also address key challenges that researchers, manufacturers, regulators and standardization bodies face when designing targeted strategies for the successful deployment of 5G enabling technologies.

The medium of instruction will be English.

CHIEF PATRON
Professor Dr. Munaz Ahmed Noor
Vice Chancellor, IUT

COURSE OBJECTIVE

Introduces several emerging technologies which will change and define the future generations of telecommunication standards.

Primarily focus on the following popular issues:
- Key steps to accelerate 5G opportunities.
- Analysis of the value of the current 5G technology trials and demonstrations.
- Evaluation of the participating organizations which are driving the technology development and standards for 5G.
- Overview of emerging technologies which may make up future 5G wireless networks.
- Strategic priorities of Digital Bangladesh towards 5G capabilities and opportunities.

Overview of the items to be covered:
1. 4G and beyond: enabling technologies and applications.
2. Millimeter-wave backhaul and access: from propagation to prototyping.
3. 5G: The microwave perspective.
4. Emerging technologies for 5G wireless cellular networks (delay tolerant network, software defined radio, cognitive radio).
5. Massive MIMO and 3D MIMO
6. Internet of Things (IoT) as a key 5G opportunity.

The course will start with fundamentals of the fourth generation (4G) of mobile communication including Long-Term Evolution (LTE). The course will then proceed with enabling technologies for 5G and vision for 5G systems.

The roles of cognitive radio, software defined radio, microwave and millimeter-wave perspectives of 5G, and Internet of Things for (IoT) as a key 5G enabling technologies will also be outlined.