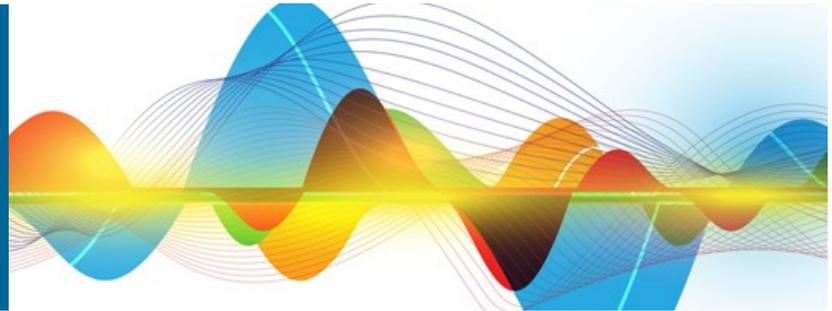




Short Course
on
**Technologies for 5G
Wireless Communication
Networks**



Important Dates

Course Dates

July 25th - 27th 2016

Last Date for Registration

July 11th, 2016

Venue

*Seminar Hall
Pioneer Batch Building
IIT Kanpur*

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Even as 4G systems are being deployed in many countries, the world faces a severe crisis of spectrum and data rates. Indeed, the explosion of mobile devices and services is largely unmatched by commensurate increases in spectrum availability, battery technologies, green energy, coverage, or service quality. The fifth generation of wireless systems, seeking to address many of these issues and more, is expected to be deployed by 2020. It is predicted that compared to the 4G network, the 5G network will achieve 1000 times the system capacity, ten times the data rate, and 25 times the cell throughput. The aim of 5G is to provide seamless coverage, connectivity, and high quality of service between heterogeneous devices and under diverse scenarios such as high mobility.

This course introduces various promising technologies for 5G wireless communication systems, such as massive MIMO, energy-efficient communications, millimeter wave communications, cognitive radio networks, and device-to-device communications. The course is especially intended to provide engineers, faculty members of engineering colleges, and graduate students pursuing Ph.D. in communications and networking, with an in depth technical exposure to 5G concepts. Further, a few interested undergraduate students with good academic record, who would like to further explore the latest research in current wireless systems, can also be accommodated. The course will provide the participants with a comprehensive treatment of a number of 'hot' research topics, open problems, potential research directions, and ideas for developing state-of-the-art testbeds. All the classes will be conducted in "classroom" style towards building up the various theoretical aspects beginning with the fundamentals, together with problem solving sessions to further enhance and consolidate understanding.

Target Audience

- Practicing wireless system engineers.
- Graduate students pursuing research in wireless communications.
- Teachers of government and private engineering colleges.

For more details and registration information, visit the website

<http://www.iitk.ac.in/ee/wireless>