



VIT
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

Academic Staff College (ASC)

In association with School of Electronics Engineering (SENSE)



Cordially invites you to

5 Days FDP (09.30 AM - 5.00 PM)

Online

Faculty Coordinators : Dr. Deepika Rani Sona, Dr. Kalapraveen Bagadi, Dr. Christina Josephine Malathi A

Faculty Development program on Recent Trends in Beyond 5G Wireless Networks

Resource Persons :

- Prof. Neelakandan Rajamohan, Electrical Engineering, IIT Goa.
- Prof. Parthajit Mohapatra, Electrical Engineering, IIT Tirupati.
- Prof. Rajesh A, Sastra Deemed University, Tamil Nadu.
- Prof. Prabu K, NIT Karnataka, Surathkal.
- Prof. P Karuppanan, MNNIT, Allahabad, Prayagraj.
- Prof. Shrishailayya M Hiremath, NIT Rourkela.

Discussion Points :

- ✓ 5G Core Network using SDN / NFV / C-RAN for E2E Network Connectivity
- ✓ VLSI Trends in Beyond 5G Networks
- ✓ Signal Processing in 5G Wireless Communication - A Compressed Sensing Perspective
- ✓ Intelligent Reflecting Surface Assisted Wireless Communication
- ✓ Physical Layer Secrecy for 6G Networks
- ✓ Cognitive Radio and ML applications to wireless communication
- ✓ 6G Beyond – Next Generation Wireless Communication
- ✓ Convergent wireless and Optical communication systems for 5G and IOT applications

	4G	5G	6G (beyond 5G)
Technology Development	Fully IP based network E-UTRAN architecture	Multi-RAT connectivity Massive MIMO, analog beamforming, millimeter-wave transmitters Slicing/guaranteed quality of service	Spectrum enhancement Spatial signal control/shaping Artificial intelligence in network planning & organization
Performance Indicators	10ms latency 5E Bps/cm ² traffic 1Gbit/s peak rate 100k connections/km ² 3GHz spectrum	<1ms latency 50E Bps/cm ² traffic 20Gbit/s peak rate 1M connections/km ² 30GHz spectrum	<100µs latency 500E Bps/cm ² traffic 400Gbit/s peak rate 10M connections/km ² 300GHz spectrum

12-16 Dec - 2022
(Monday – Friday)

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