

Registration Form

About the event:

NGRCT is an online value-added course organized by the Department of Communication Engineering (DCE), School of Electronics Engineering, Vellore Institute of Technology, focusing on next-generation and beyond wireless communication technologies. The course highlights emerging research directions through expert talks by DCE faculty, covering 5G and beyond, including diversity techniques, resource allocation in D2D communication, machine learning and AI-enabled communications, cognitive radio spectrum sensing, space-air-ground integrated networks, RIS- and UAV-assisted systems, orbital angular momentum, advanced antenna design and arrays, green communication, optical wireless technologies, and quantum-assisted communications. This course aims to motivate and equip the next generation of communication and signal processing engineers. The target audience includes research scholars, postgraduate, and undergraduate students working in wireless communication, signal processing, antennas, and intelligent communication systems.

 **Hands-on ML and Quantum techniques for wireless communications**

Talks Scheduled:

- Introduction to Next-Generation Wireless Communications
- Diversity Techniques in 5G and Beyond
- Resource Allocation in D2D communication
- Machine Learning/AI for 5G Communications
- Spectrum Sensing Techniques for Cognitive Radio Networks
- Space-Air-Ground Integrated Network
- RIS and UAV-assisted 5G
- Orbital Angular Momentum for 5G and Beyond
- Antenna Design for 5G
- Role of Antenna Arrays in 5G
- Green Communication
- Optical Wireless Technologies for 5G Communication
- Quantum-assisted 5G Communications
- Quantum Machine Learning for 5G

Registration Link:

<https://events.vit.ac.in/>

Advisory Committee

Dr. Jasmin Pemeena Priyadarsini M (Professor and Dean)

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Dr. Kannadassan D (Professor & Head)

Department of Communication Engineering,
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Coordinators

Dr. Sudhanshu Arya (Assistant Professor Senior)

Dr. Abhijit Bhowmick (Professor, Grade 1)

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Mode: Online (Through MS Teams)

Time: 07:30 PM to 09:30 PM

Registration: INR 300/- (Including GST)

Note : E-certificates will be provided on successful completion of the course.



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

Value Added Course on

Next Generation Radio Communication Technologies (NGRCT)

10th February to 08th April 2026

Organized by

Department of Communications Engineering

School of Electronics Engineering

Vellore Institute of Technology, Vellore

