

Comprehensive Introduction to 5G and Wireless Communication

Length: 2 Days

Course Overview: 5G, the fifth generation of wireless mobile communication, has taken 2019 by storm! Some people are setting optimistic expectations, some are making ridiculous theories, while others are awaiting any and every update about 5G. If we look at a few decades in the past, 1G, 2G, 3G, and 4G have changed our social, professional, and personal lives drastically. Yet 5G is expected to be the biggest game-changer of all, which is amazing but not surprising! This course will take you through the history of previous versions and give you a sneak-peek into 5G technology. The course starts with 1G, the first generation of wireless telecom, and takes key topics from every consequent update, such as 2G, 3G, and 4G. You will learn the intent behind each update, their frequencies, and how they were able to shape the world of wireless technology. Towards the end, you will understand in detail what's new in 5G and explore the job roles that this new technology will bring. By the end of this course, you will have explored the history of previous wireless telecom technologies and will have gained the fundamental knowledge of 5G wireless technology.

Audience:

Whether you are a communication engineer, 5G enthusiast, or anyone who is curious about 5G technology, this course is for you. There are no prerequisites for starting this course.

COURSE CONTENT

- Understand the frequency modulation technology behind wireless networks
- Become familiar with the code division multiple access
- Distinguish between circuit-switched and packet-switched networks
- Explore 4G antennas and Multiple Input Multiple Output (MIMO)
- Understand the concepts of 5G new radio, millimeter waves, and beamforming
- Take a look at the key market development for 5G