



Excellent technical knowledge and presentation / facilitation skills.



Watch our course intro video.



Introduction to 5G Radio Planning

Course Description

5G radio planning is a key part of deploying and optimizing any 5G network. This short course is designed to introduce the methodology employed during 5G radio planning. As such, it includes the various challenges related to the new 5G radio interface. In so doing, key aspects of 5G spectrum planning, 5G radio propagation, propagation modelling and the 5G link budget are discussed. Finally, the course summarizes the main factors which impact upon a 5G cell's peak rate and capacity.

This course has no prerequisites.

1/2 day
(LiveOnsite,
LiveOnline)

3 hours
learning
(OnlineAnytime)

3

CPD Learning
Credits



Level: 1
(Beginner)

This course will contain the following sections:

1. Introduction to 5G Radio Planning

Topic areas covered include:

- Challenges of 5G Radio Planning:
 - New 5G Air Interface.
 - 5G Spectrum.
 - Massive MIMO and Beamforming.
 - 5G Deployment Options.
- 5G NR Radio Planning Process:
 - 5G Information Gathering.
 - 5G Dimensioning.
 - 5G Deployment and Optimization.
- 5G Spectrum Planning:
 - Current and Future 5G Spectrum.
 - Planning 5G Spectrum.
- Radio Propagation for 5G:
 - Propagation Loss.
 - Low-band, Mid-band and High-band.
 - Penetration Loss for Radio Propagation.
 - High-band Propagation.
- Propagation Models for 5G:
 - Propagation Models Basics.
 - Topographical Data (DTM and DEM)
 - 5G Propagation Modelling.
- 5G NR Link Budget:
 - What is a Link Budget?
 - 5G Link Budget.
 - Cell Coverage.

- 5G Throughput and Capacity:
 - Capacity Dimensioning.
 - Factors Affecting Cell Capacity.
 - Peak Rates of 5G.



**Watch a Sample
Video Online**

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