

# 5G EXECUTIVE TRAINING PROGRAM

Mobile technologies  
5G and IoT



## ABOUT THE 5G EXECUTIVE TRAINING PROGRAM ?



The 5G Executive Training program in Mobile technologies, 4G, 5G and IoT is aimed at professionals wishing to have an executive view on those technologies, on their use cases and future developments (Cloud, virtualization of mobile networks , NFV / SDN , C-RAN...) as well as in mobile spectrum valuation, Network cost modelling and more...







# PROGRAM CHAPTERS



## CHAPTER 1 : Principles of 5G networks

- 4G Evolution
- Introduction to 5G Networks
- 5G Spectrum and Frequency Bands
- 5G New technologies : Massive MIMO, Beamforming, DSS
- 3GPP position with 5G
- 5G Electromagnetic field
- 5G market updates

## CHAPTER 2 : 5G Network Architecture and Implementation

- Interface Radio NR
- Architecture of 5G Access Networks
- 5G core network architecture
- 5G Network Slicing & Use cases
- 5G Planning & Dimensioning
- 5G Practical Coverage Vs 4G

## CHAPTER 3 : 5G IoT and application

- Definition of IoT networks
- IoT technologies : NB-IoT, LTE-M, and LoRa
- IoT platform and IoT architecture
- Description of IoT use cases
- Evolution of IoT technologies to 5G

## CHAPTER 4 : Network cost modeling : Gbyte Cost and minute costs

- Calculation methodology
- Gbytes cost for operator IN €/GB
- Minute cost for operator cts €/min
- Benchmark between different operators in the world

## CHAPTER 5 : Valorization of 5G Spectrum

- Spectrum auction
- Spectrum valuation
- Cost / benefit analysis of spectrum attribution scenarios
- Calculation of the bottom-up spectrum value
- Real practical use case

## CHAPTER 6 : 5G Use Cases and Business Model

- 5G Business Models and Monetization
- Co-innovation between verticals
- 5G Use case For Industry 4.0
- 5G Use case for Health Focus on Covid 19
- 5G Use case for Automotive industry
- 5G for enterprises
- Combining 5G Technology with Artificial Intelligence

## CHAPTER 7 : 5G evolution and Beyond

- 5G Open RAN and applications
- Mobile Edge computing and 5G
- 5G and Satellite
- Road to 6G

