5G and IoT: Key Technology Components, Business Models, Product Strategy And Revenue Streams

Who Should Attend?

We designed this highly interactive program for Executives, Managers, Directors, Head of Departments, C-Suite Level in, but not limited to, telecommunication strategies, network engineering, product development, 3G/4G/ LTE/5G network management, as well as practitioners that involved in telecommunication finance management and business development and marketing of the organization.

According to a study by Accenture Strategy, it predicted 5G deployment would be able to yield an increase of 3 million new jobs and contribute to about USD500 billion economic boost. With the speed of up to 100 times faster than 4G, 5G is bringing us closer to the reality of remote surgery and flawless VR experiences. There are plenty of aspects that telecommunication and network professionals need to take into account before we could fully rollout 5G into reality.

By the end of this 3-day executive program, you will be geared up with good understanding of 5G and IoT best theoretical knowledge. It will help you to establish a concise roadmap in transiting your existing LTE-A topology to the future of 5G.

Course Scope

1. Comprehensive Overview of 5G Deployment
   - Global market trends, milestones and standardization
   - Mobile data growth forecasts and trends
   - Mobile broadband: devices, services, applications, deployments and spectrum
   - Wireless technology landscape – road to 5G
2. Status of IMT-2020 in ITU and Progress of 5G in 3GPP
   - Specifying IMT-2020
   - Usage scenarios for IMT until 2020 and beyond
   - 5G Radio Access Network: New Radio (NR) access technology
   - 5G system architecture: principles, requirements and deployment scenarios
3. 5G LTE-Advanced Pro Enhancements
   - Multi-User Superposition Transmission (MUST)
   - Device-to-Device (D2D) communication
   - In-door positioning enhancements
   - Licensed Assisted Access (LAA) and LTE-WLAN Aggregation (LWA)
4. 5G Network Services Related Enhancements
   - Control and User Plane Separation (CUPS)
   - Cellular Internet of Things (CIoT)
   - Network Function Virtualization/Software Defined Network (NFV/SDN)
   - Network Slicing for 5G networks and services
5. Integration of 5G and Internet of Things (IoT)
   - IoT market drivers and requirements

5G and IoT: Key Technology Components, Business Models, Product Strategy And Revenue Streams

- Low Power Wide Area (LPWA) IoT technology landscape
- LTE Evolution for IoT connectivity – 5G enhancements
- The Tactile Internet
6. Support for Vehicle-to-Everything (V2X) services
   - Overview of V2X
   - Benefits and challenges of V2X
   - Role of 5G in V2X
   - Typical V2X applications
7. Smart (Connected) City concept
   - Smart City definition and the Connected City Ecosystem
   - Use cases identification and description
   - Connected City architectures & framework
   - Public-Private Partnerships Business model
8. IoT business models, product strategy and revenue streams
   - Business Model Framework for IoT applications
   - Layers of the IoT value chain
   - Product and service based business models
   - IoT architectural layers vs. business models

Course Objectives

This interactive session will show you the comprehensive roadmap of 5G technology deployment and strategy development in leveraging 5G technology in the future of IoT services. Besides that, you will have a multi-focus view on the key technology components of 5G, as being the critical manifestation of the International Telecommunication Union's vision of International Mobile Telecommunications-2020.

During this course, we will enlighten you by the analysis of IoT business models, product strategies and revenue streams based on the Horizon 2020 EU Research and innovation programme. It would assist you in making strategic business decision in 5G deployment. By discovering the critical performance enhancement in 5G wireless communication, you will learn step-by-step strategy to reach a game-changing network with faster download speed, ultra-low latency and high capacity offering.

By the end of this program, participants will be able to:

- Gain deep insight into the transition of 5G deployment from LTE for faster download speeds, low latency and high capacity
- Understand how 5G changes the whole ecosystem to rethink product strategy
- Understand the use cases of 5G deployment in shaping the future of IoT technology
- Grasp the emerging standards of 5G wireless that would define the future of 5G implementation in 2020
- Discover possible revenue streams connected with the broad field of IoT

5G and IoT: Key Technology Components, Business Models, Product Strategy And Revenue Streams

Prerequisites

The participants should have general telecommunications/computer science knowledge.

Training Structure

Three-day training divided into logical sessions.

Methodology

Instructor-led training. Lectures and multimedia presentations.