



## 6G Training for Everyone

As we move beyond 5G, the next-generation wireless technology—**6G**—promises groundbreaking advancements in connectivity, intelligence, and digital transformation. This training course provides a **comprehensive, technical, and strategic** overview of 6G, equipping participants with the knowledge needed to **understand, design, and contribute** to the evolution of mobile networks.

Through **detailed modules**, the course 6G Training for Everyone covers key topics, including **6G standardization, spectrum management, device evolution, air interface innovations, and deployment challenges**. Participants will gain insights into **AI-native networks, joint communication and sensing (JCAS), terahertz communication, and sustainable network designs**.

### Duration

5 hours

## **Training Content :**

### **Module 1: 6G Standardization and Ecosystem**

- From 5G Advanced to 6G
- 6G ecosystem & research framework
- 6G 3GPP Timeline
- 6G ITU Timeline
- Challenges for Mobile Service Providers

### **Module 2: 6G Use Cases and Requirements**

- 6G Evolution or Revolution ?
- 6G driven by value and sustainability
- 6G use cases
- 6G performance requirements
- 6G societal requirements
- Key value indicators

### **Module 3: 6G Spectrum**

- 6G Spectrum
- Refarming and New spectrum
- SubThz Frequency challenges
- Frequencies in WRC-27

### **Module 4: 6G Devices**

- 6G Smartphones
- 6G Wearables
- Extended reality
- Mmtc communications

## Module 5: 6G Key Design Principles

- 6G main objectives
- 6G services
- 6G architecture principles
- 6G air interface
- 6G lean signalling
- AI Native Air Interface

## Module 6: 6G Technology enablers

- New 6G Spectrum
- Radio sensing and imaging
- Efficient photonic systems
- Satellite & High-Altitude Platforms (HAPs)
- Reconfigurable Intelligent Surfaces (RIS)
- ZED : Zero Energy Device
- JCAS : 6G Joint communication and sensing

## Module 7: 6G Deployment challenges

- 6G Cost Consideration
- 6G Security consideration
- 6G Sustainability
- AI and machine learning