

Technology Primer: Immersive Technologies (AR/VR/MR)

Instructor Led Live Virtual Class | Duration: 0.5 Day | Course Number: TPR1036

Immersive Technologies have revolutionized all aspects of the computer industry. The impacts of Immersive Technologies can be seen in the way users interact with the real world, from augmenting reality to mixing reality with additional objects. The telecom industry is different. This course provides an overview of Immersive Technologies from a telecom perspective. Immersive Technologies is explored from a definition, underlying technology and use-cases perspective. It starts with an introduction to Immersive Technologies. The course then moves to key Immersive Technologies use cases and the Immersive Technologies of Augmented Reality, Mixed Reality, and Virtual Reality. The course concludes with a discussion on how a telecom operator will need to enhance their network to support Immersive Technologies.

Intended Audience

A high-level technical overview to personnel involved in product management, marketing, planning, design, engineering, and operating wireless (4G, 5G) and wireline access networks

Learning Objectives

After completing this course, the student will be able to:

- Define the types of Immersive Technologies
- List the key use cases for Immersive Technologies
- Compare and contrast types of Immersive Technologies
- List different requirements for supporting Immersive Technologies

Course Outline

1. Introduction to Immersive Technologies

- 1.1. Immersive Technologies defined
- 1.2. Types of Immersive Technologies
 - 1.2.1. Augmented Reality (AR)
 - 1.2.2. Mixed Reality (MR)
 - 1.2.3. Virtual Reality (VR)

2. Immersive Technologies Use Cases

- 2.1. How is telecom different?
- 2.2. Telecom use cases
- 2.3. Telecom impacting use cases
- 2.4. Impact of Immersive Technologies on telecom architecture

3. Immersive Technologies Overview

- 3.1. AR defined
- 3.2. MR defined
- 3.3. VR defined
- 3.4. 360 vs. Volumetric

4. Basics of Supporting Immersive Technologies

- 4.1. Requirements on the Edge Device
- 4.2. Requirements on the Network Devices
- 4.3. Challenges and key considerations