5G Network for Leadership

TPR1055x | Expert-Led Live | 5G Core | Expert
Course Duration: 4 hours

Telecom service providers are deploying 5G Non-Standalone (NSA) and Standalone (SA) networks using various frequency spectrum to enable emerging use cases for higher throughput, lower latency, and massive capacity. This leadership session is part of a multi-part series that helps network leaders explore use of low, mid, and mmW spectrum for 5G, features of 5G RAN and core network and emerging trends of telco cloud, MEC, and network slicing. This enables leaders guide their teams for effective network planning, design, engineering, deployment, and monitoring.

Intended Audience

This training is intended for leaders of network planning, engineering, and operations.

Objectives

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

- Identify 5G SA and NSA network components and their connectivity
- Articulate use of various frequency spectrum for 5G networks
- Step through the 5G SA and NSA operations for end-to-end network view
- Effectively communicate within organization and with partners
- Guide and inspire your teams towards 5G strategy
- Identify talent gaps and prioritize planning, engineering and operations tasks
- Identify dependencies and impacts across organization

Course Prerequisites

No Prerequisites

Outline

1. 5G Network for SA and NSA
1.1 5G RAN - gNB and its components - CU, DU, RU
1.2 5G Core Network Functions - AMF, SMF, …
1.3 Configuration for 5G Standalone (SA) network
1.4 Configuration for 5G Non-Standalone (NSA) network
1.5 Use of Carrier Aggregation and Dual Connectivity
Exercise: Build your 5G network

2. Spectrum for 5G Deployment
2.1 Low, Mid, and High band spectrums for 5G
2.2 FDD and TDD spectrum for 5G
2.3 Beamforming and Beam management
2.4 SU-MIMO and MU-MIMO in 5G
Exercise: Spectrum usage in your network

3. 5G Operations in SA and NSA
3.1 Life of a device in 5G SA network
3.2 Registration and Data connectivity
3.3 Life of a device in 5G NSA network
3.4 Getting ready for voice services in 5G
Exercise: Step through 5G callflow for SA and NSA

Summary and take-aways

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