Welcome to 5G NR-Unlicensed (NR-U)

5G_120d | On-Demand | 5G Access | Express
Course Duration: 1 hour

In this training, you will explore the world of using unlicensed frequencies for 5G NR-based networks. The large amount of unlicensed spectrum at 6 GHz, mmWave, as well as 5 GHz, provides ample resources to deliver high data rates and low latency for 5G networks. This opens up many opportunities to bring 5G to enterprise customers for private 5G network deployment. The training covers both standalone and anchor mode NR-U network architecture, operations, and deployment considerations.

Intended Audience

This course is designed for a broad audience of personnel working in the wireless industry.

Objectives

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

- Define 5G NR-Unlicensed (NR-U) and identify use cases of NR-U deployment
- List capabilities, design considerations, and limitations of NR-U
- Sketch an end-to-end architecture of anchor and standalone NR-U
- Step through an end-to-end operation of NR-U
- Identify the band combinations for NR-U deployment

Outline

1. What and Why 5G NR-Unlicensed (NR-U)?
1.1 What is NR-U?
1.2 Why NR-U?
1.3 NR-U vs. Wi-Fi - Usage comparison
1.4 Usage scenarios

2. NR-U Architecture Overview
2.1 Anchored NR-U
2.2 NR-U Standalone

3. NR-U Operations
3.1 Anchored NR-U operations
3.2 Standalone NR-U operations
3.3 NR-U Operations in the 5-6 GHz Band
3.4 Transmit Power Limits for the 6 GHz Band

4. NR-U Deployment Scenarios
4.1 Deployment scenarios
4.2 Band combinations for NR-U

Putting it all Together
Final Assessment

Award Solutions