Understand 5G Protocols and Signaling (3GPP R17)

Student Guides

Understand 5G Protocols and Signaling (3GPP R17) | TP00005-V-1701 V0

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Course Outline

Welcome to Understand 5G Protocols and Signaling (3GPP R17)

Course Objectives

Welcome to Understand 5G Protocols and Signaling (3GPP R17)

Upon completion of this course, you should be able to:

Review 5G E2E network architecture

Recall 5G network architecture options

Identify 5GC Network Functions

Explain NG-RAN interfaces and protocols

Explain 5GC Service Based Interfaces principles

Discuss 5GC resiliency and reliability

Describe NR channels

Explain NR Layer 2 operation

Discuss NR Physical Layer

Describe NR RRC protocol

Explain RRC functions and procedures

Analyze RRC signaling

Describe The protocol stacks between UE and 5GC

Identify 5GMM and 5GSM states

Explain UE Registration and Connection Management procedures

Explain UE PDU Session Management procedures

Describe typical UE call processes

Analyze NAS signaling

Describe 5G network architecture and procedures for Network Slicing

Describe System security architecture and procedures

Explain UE mobility Management in the AMF

Describe UE mobility in RRC Idle and RRC inactive states

Describe UE mobility in Connected Mode

Describe the architecture for 5GS and EPC interworking

Describe Inter-System (5GS and EPS) mobility