



# 5G Voice Solutions - VoNR and EPS Fallback Part 2: 5G and IMS Registration

5G\_224d | On-Demand | 5G Core | ⚙️

Course Duration: 4 hours

This is the second course in a four-course set of self-paced courses encompassing 5G Voice Services. In this course, you will learn 5G Registration and PDU session setup with the IP Multi-media Subsystem (IMS) for voice services. You will also gain an understanding of how 5G voice calls use IMS for voice and an overview of the IMS architecture. Each course in this four-course set can stand on its own or can be combined with other courses as necessary to meet your learning objectives

## Intended Audience

Planning, design, engineering and operations personnel

## Objectives

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

- Describe UE registration and PDU session establishment in 5G networks
- Explain pre-call functions in 5G registration and PDU session establishment
- Identify the key components of the IMS network, including CSCFs and application servers
- Analyze the IMS registration call flow
- Describe the integration of 5G Core and IMS architecture and its impact on voice services

## Course Prerequisites

[5G Networks and Services](#)

## Outline

1. 5G Registration and PDU Session Establishment
    - 1.1 UE Registration in 5G
    - 1.2 PDU Session Overview and Establishment
    - 1.3 Pre-Call Functions in 5G Registration
    - 1.4 Pre-Call Functions in PDU Session EstablishmentExercise: PDU Session Establishment for IMS DNN
  2. The IMS Network
    - 2.1 CSCFs and the Gm Interface
    - 2.2 Application Servers and IFC
    - 2.3 Interworking FunctionsExercise: 5G Core and the IMS Architecture  
Exercise: IMS Registration Call Flow  
Exercise: 5G and IMS Registration
- Final Assessment