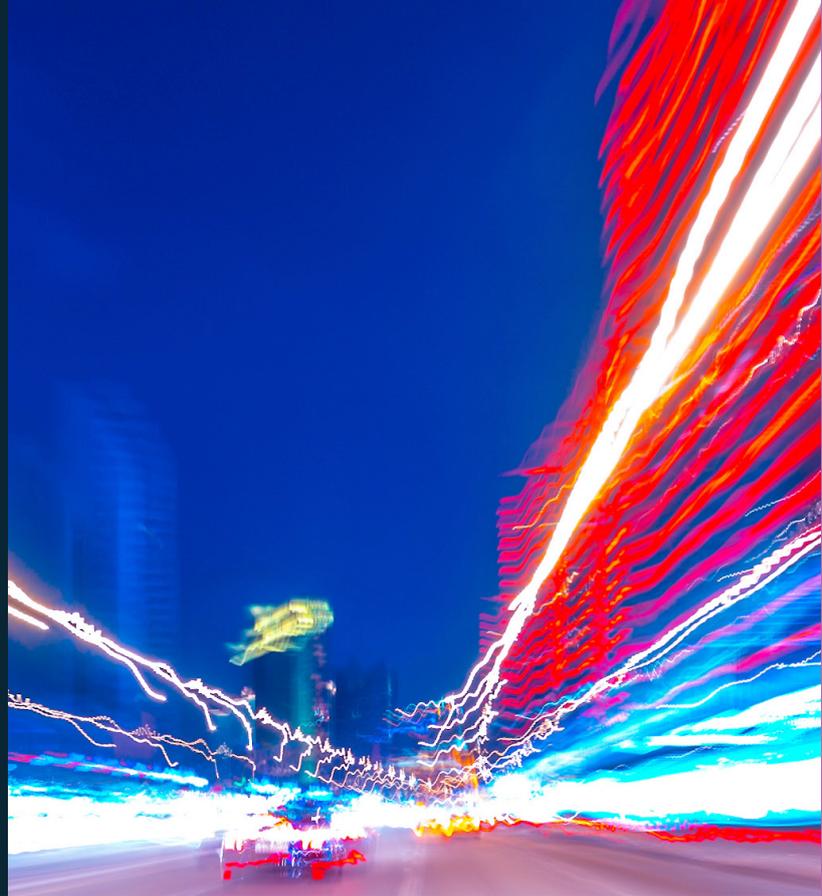




Excellent training, very good use of my time.



Watch our course intro video.



## Wi-Fi Offload

### Course Description

In a bid to improve both network capacity and data throughput, service providers are increasingly turning to Wi-Fi as a viable addition to their network infrastructure. This course explains how Wi-Fi offload is supported in terms of providing a seamless transition between the two radio technologies, tracking the architecture required, the mobility options available and the fundamental concepts of operation.

**Prerequisites:** LTE System Engineering, Wi-Fi System Engineering would be advantageous.

**1/2** day  
(LiveOnsite,  
LiveOnline)

**3** hours  
learning  
(OnlineAnytime)

**3**

CPD Learning  
Credits



Level: 2  
(Intermediate)

**This course will contain the following sections:**

## 1. Wi-Fi Offload Architecture

**Topic areas covered include:**

- Wi-Fi Offload Architecture Fundamentals:
  - Drivers for Wi-Fi Offload.
  - Network Architectures:
    - Trusted Non-3GPP Access.
    - Untrusted Non-3GPP Access.
- Mobility Mechanisms:
  - Host Based Mobility.
  - Network Based Mobility:
    - PMIPv6.
    - GTP.
  - Multi Access PDN Connectivity.
  - Non-seamless Wi-Fi Offload.
- Network Architecture:
  - Trusted Non-3GPP Access (GTP):
    - UE, Access Point, TWAG, PDN-GW, HSS, AAA Server, PCRF, ANDSF.
    - Protocol Stacks and Reference Points.
- Roaming Architectures:
  - Home Routed.
  - Local Breakout.

## 2. Wi-Fi Offload Initial Procedures

**Topic areas covered include:**

- Initial Procedure Fundamentals:
  - Bearer Models and Bearer Mapping.
- Network Discovery and Selection:
  - Network Discovery:
    - RAN Assistance Information.
    - ANDSF Rules.

## Wi-Fi Offload Initial Procedures (cont.)

- Accessing the Wi-Fi Network:
  - Joining a Wi-Fi Network.
- Initial Attach:
  - EAP Authentication (Part 1):
    - Detailed Signalling Evaluation.
  - Session Creation and Management:
    - Detailed Signalling Evaluation.
  - EAP Authentication (Part 2):
    - Detailed Signalling Evaluation.

## 3. Wi-Fi Offload Mobility and Interworking

**Topic areas covered include:**

- Mobility and Interworking Fundamentals.
- Wi-Fi Mobility:
  - Access Point Channel Reports.
  - Wi-Fi Reassociation.
  - 802.11 Amendments:
    - 802.11k, 802.11r.
- Wi-Fi to LTE Handover:
  - Detailed Signalling Evaluation.
- LTE to Wi-Fi Handover:
  - Detailed Signalling Evaluation.
- Wi-Fi Offload and Roaming:
  - Home Routed.
  - Local Breakout.



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OnlineAnytime**



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- Dedicated trainers to understand your products and training requirements
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