



Superb as always.  
Thanks very much.



Watch our course intro video.

# Introduction to Small Cells

## Course Description

As small cells continue to be deployed in order to augment the service provider's RAN coverage, this course covers the main considerations associated with small cell solutions. This includes the benefits of small cell deployment, as well as the supporting architecture required. The course also discusses the remote management of small cells and also the requirements for the backhaul network, including focus on SON.

This course has no prerequisites.

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

**3** hours  
learning  
(OnlineAnytime)

**3**

CPD Learning  
Credits



Level: 1  
(Beginner)

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

## **1. Introduction to Small Cells**

**Topic areas covered include:**

- Small Cell Introduction:
  - The Need for Small Cells.
  - What is a Small Cell?:
    - Micro, Pico and Femto Cells.
  - Benefits to Users:
    - Extended Coverage.
    - In-Building Coverage.
    - Additional Capacity.
  - Public Small Cells.
- End to End Architecture of Small Cells:
  - Small Cell Gateway.
  - Security Gateway:
    - SeGW.
  - Management System.
  - Technology Specific Architecture.
- Operator Deployed Small Cells:
  - Targeted Capacity.
  - Non Targeted Capacity – General Coverage.
  - In Building Solutions.
  - Technology Options.
- Management and Control of Small Cells:
  - TR-069 - CPE WAN Management Protocol.
  - Frequency and Timing Synchronization.
  - Small Cell Security.
  - Handover Considerations.
- Backhaul Considerations:
  - Wireless Backhaul.
  - Wired Backhaul.
  - Cached Content.
- SON and Small Cells:
  - Auto Cell Configuration.



**Watch a Sample  
Video Online**

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**LiveOnsite, LiveOnline,  
OnlineAnytime**



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