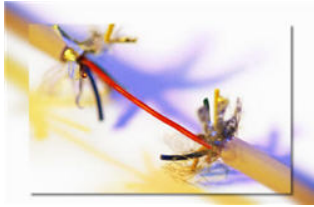# Wireless Access

Mobile WiMAX

The WiMAX standard defines a system for wireless broadband that will compete with Wi-Fi hotspots and cellular broadband systems like UMTS. The standard gives a capacity of 70Mbps in a 40km radius. With high capacity and low cost for base station installations the WiMAX technology is very interesting.

Mobile WiMAX

OBJECTIVES
Understanding Mobile WiMAX..
- functionality, interfaces, protocol types
- radio and access methods
- session phases
- QoS capabilities
- security

INTENDED FOR
people working with wireless and mobile datacom solutions, system management and system design.

PRECONDITION
No WiMAX preknowledge is assumed but knowledge corresponding our WiMAX Technology course is preferable. The course describes Mobile WiMAX technology and related technical terms from a system functionality perspective.

Standard - 2 days

Content day1

¤ Mobile WiMAX & other Mobile Systems
· Reference model
· End-to-end Network Systems Architecture
· UMTS and WLAN solutions

¤ Mobile WiMAX System Overview
· Integration 3G nw's
· ASN profiles
· Air interface protocols

¤ WiMAX access
· OFDMA/SOFDMA
· Symbols
· PHY-layer

¤ WiMAX signalling fundamentals
· MAC and Header types
· UL/DL Messages
· Channel descriptors

¤ System functions
· Aquisition
· Ranging
· Access
· Paging
· Idle

¤ Connection establishment
· End-to-end Connection Overview
· IP routing IPv4 and IPv6
· Connection Setup

Content day 2

¤ Traffic Cases with HandOver
· End-to-end Connection Overview
· IP routing IPv4 and IPv6
· Connection Setup

¤ Mobility Management
· Radio
· IP

¤ QoS
· QoS Classes
· CID, Service flows and Parameters

¤ Services and Security Principles
· Data delivering types
· Multicast and Broadcast
· AAA
· Security Nodes
· Key Structure

¤ Accounting
· Principles
· Architecture
· Management
· QoS based Accounting

¤ Multiple Antenna Systems
· Radio propagation and terms
· Transmit and Receive diversity
· STC, Space Time Coding
· MIMO, Multiple Input/Output

¤ Interworking
· DSL
· IMS
· UMTS – 3GPP

We reserve our rights to adjust course content without prior notice.

Related Courses
¤ WiMAX Technology (1 days)
· Low Technical view on WiMAX
· Brief understanding
· Bass words explained

¤ Mobile WiMAX Signalling (2 days)
· In deept description of interfaces and protocols
· Interworking with other networks
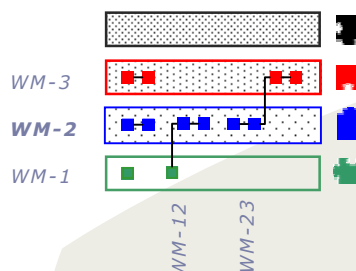
WiMAX Products

WM-1:WiMAX Technology (1d)
WM-2:Mobile WiMAX (2d)
WM-3:Mobile WiMAX Signalling (2d)

Product Combinations

WM-12:WM-1+2 (3 days)
WM-23:WM-2+3 (4 days)

Please call for more information

WM-3

WM-2

WM-1

WM-12   WM-23

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