

WiMAX

WiMAX v1 - WiMAX radio networks

WiMAX

is an interactive, e-learning course designed to run under Windows™ XP or Vista.

Gives an introduction to WiMAX, the technology which has been promoted as capable of providing cheap mobile broadband services from fast Internet access to mobile interactive television. The course enables the user to appreciate its possibilities and problems and to place WiMAX in the competitive broadband radio marketplace.

Training delivery:

Standalone installation from CDROM or study on-line over the Internet or an intranet.

Course summary:

- What WiMAX is: Organisations involved; IEEE 802.16 standards; testing and certification; proprietary systems like WiBro (Wireless Broadband).
- What WiMAX can do: 'Enhanced' WiFi, backhauls; wireless local loop; disaster relief; alternative radio access technology for cellular systems, quadruple play; integrating technology.
- How WiMAX works: WiMAX PHY and MAC layers; WiMAX and Internet Protocol (IP); effects of mobility; alternative duplex systems FDD and TDD; licensed and unlicensed frequency bands; OFDM and SOFDMA; adaptive antenna systems (AAS) and multiple-in, multiple-out (MIMO); coding and error correction: FEC and HARQ.
- Other WiMAX developments: Qualcomm - Flarion's Flash OFDM™; mobile multi-hop relay (MMR); high-speed mobile; frequency sharing with UHF TV.

Target audience:

Technical personnel involved in the planning or maintenance of WiMAX systems and business managers needing an appreciation of the technical and commercial possibilities and challenges.