Wi-Fi Technology – From theory to practical operation

COURSE DESCRIPTION:

This course is designed for technical professionals wanting to develop their knowledge on Wi-Fi technologies. The one-day course covers Wi-Fi technology principles, practical operation and enterprise network design. The course will enhance the technical capability for your day-to-day job, your business operation efficiency etc.

WHO SHOULD ATTEND:

ICT engineers, technicians, radio amateurs, academics, telecommunication regulators, and people with basic knowledge of telecommunication technologies.

COURSE OBJECTIVES:

- To understand the principle of Wi-Fi technology, its evolution and key features
- To understand difference between consumer and enterprise Wi-Fi networks
- To understand enterprise or home Wi-Fi network deployment, as well as elements in the network
- To understand how Wi-Fi works with other mobile and cable technologies to provide connectivity
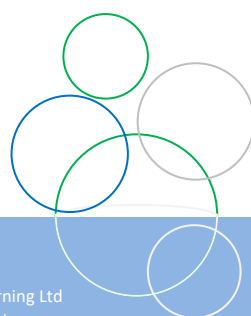
SOME COURSE BENEFITS:

- Be able to plan and design a Wi-Fi network for residential, business or large enterprise
- Be able to troubleshoot common issues in Wi-Fi network such as interference, blind coverage, poor throughput etc.
- Be able to plan an IT roadmap for organisations

FORMAT:

1-day, interactive classroom based or live online via Zoom

Maximum attendees 12 per course

CONTENT:

Morning

- The basics of wireless communication (simplifying the language)
- Wi-Fi technology principle and its evolution
- Spectrum and Wi-Fi channels
- Wi-Fi 6/7 technology features
    - MU-MIMO
    - BSS-Colouring
    - OFDMA
    - Automated frequency coordination
    - Pre-amble puncturing
    - Multiple link operation

Afternoon

- Wi-Fi deployment and troubleshooting
    - Enterprise network design
    - Mesh Wi-Fi network
    - Wi-Fi calling
- Wi-Fi technology opportunity and limitation for enterprise
- Private cellular network

Assessment (Optional for in-house courses)

- Instructor led interactive quizzes
- Multiple choice written test

Delivered in association with

SPECTRUM LAB

COMMS LEARNING