Modern Telecommunications Simply Explained

COURSE DESCRIPTION:

Telecommunications is a fast changing Industry full of jargon; its no wonder that we get confused! If you'd like a solid explanation of todays technologies presented by an expert in simple English over a day that is easy to follow and understand, and tailored to the context of your role, then this is the course for you.

This non-technical, one day programme explains current telecommunications systems like fibre, wireless, 4G, Fixed Broadband, Ethernet, The Internet and WorldWide Web plus the applications they enable. It will also explore the future of telco networks such as 5G and the applications it could enable. It will provide you with a greater understanding of the language and acronyms and help you to grasp just what it is these technologies do.

Delivered in a fun, interactive way with hands-on exercises and a quiz or two!

WHO SHOULD ATTEND:

Management, Administrators, Accounts personnel, Human Resources, Marketing, Salespeople, Legal staff and others wanting a **non-technical** overview of current & future telco technologies and applications.

Anyone wanting to understand todays fixed and mobile broadband offerings and the new applications and ways of working/playing they enable.

SOME COURSE BENEFITS:

- Understand modern broadband enabled by Fibre & G-PON, Copper & V-DSL and 4G Mobile
- Understand the language and acronyms surrounding modern telco networks
- Understand how new applications and new ways of working will lead to efficiencies and productivity gains

COURSE OBJECTIVES:

- To clarify the language & technologies surrounding Fibre Optics Networks
- To understand the drivers for high speed Broadband Networks.
- Understand V-DSL, G-PON, Ethernet and 4G, the technologies, benefits and limitations
- To understand the future, 5G and IP services and what they could mean for us

COMMS LEARNING

CONTENT:

Non Technical Overview of Current Telco Networks & New Applications

Morning

- Terminology Exercise
- Data and Voice explained
- Why Digital?
- Circuits v Packets (physical v virtual)
- Transmission Mediums - Copper, Fibre, Wireless (new vs. old)
- The aging Local Loop, PSTN, ISDN, x-DSL
- LAN's & WAN's
- A Simple Reference Model
- Global Broadband Projects Explained
- Fibre & Wireless Broadband – advantages of UFB & RBI
- Fibre Optic Technology
- Fibre Optic Networks and Applications for NZ
- Mobile Networks : 1G to 4G+, 5G Overview

Afternoon

- Local Area Network (LAN) Basics
- Ethernet History & Current Implementations
- Class of Service and Quality of Service (CoS & QoS)
- The Internet & The WWW
- Internet v4 Protocol Addressing
- IP Version6 – It's purpose & Benefits
- Quality of Service (QoS) in IP Networks
- Guaranteeing Quality in IP Networks
- Voice over IP & SIP – an simple example of IP Networking
- New Fast Broadband Applications
    - HD Video (Streaming & Conferencing)
    - Cloud Based Apps
- Cost Saving Ideas
    - Remote Working
    - Mobility
- Case Studies & Discussions
- Putting it all together – The Converged Network