

Network Infrastructure







Network Infrastructure Fundamentals

Program Overview

Gain detailed knowledge in the field of telecommunications network infrastructure.

To operate successfully, all methods of communication require a source and a destination with a pathway in between. The source is most often a smart device such as a phone, tablet, scanner, camera, card reader etc. The destination (the point of processing the data) could be a telephone exchange or storage and processing equipment in a data centre. The media pathway can be fibre optic or copper cables, or quite often wireless links.

This program provides a broad understanding of the principles of communications systems, an understanding of voice and data communications technologies, and how to relate that information to the complexity of the physical network required.

It explores the physical infrastructure components that combine to create the pathways, containment systems and network cabling infrastructure.

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8 Hours Distance Learning or 1 Day Instructor-led

Learner Profile

This program has been designed for individuals who are either new to the network infrastructure sector or are seeking to develop their knowledge in relation to telecommunications networks. If you would like to discuss your experience or suitability for this program please contact us.

Pre-requisites

There are no specific pre-requisites for this program, however, some awareness of the network infrastructure sector would be advantageous.

Program Requirements

As a distance learner, you will need a suitable computer with internet connection, together with sufficient IT competence to make effective use of word processing, internet and email. Instructor-led learners via remote attendance, are required to have a webcam enabled laptop or suitable device with unrestricted wireless internet connectivity, the latest internet browser and suitable applications for reading/annotating PDFs and editing standard office documents.

Program Objectives

The program de-mystifies the technical terminology that permeates all extents of network infrastructure, using simple language, clear explanations, and useful analogies.

Certification

- ► CNet Training Certificate
- ► Use of the official Network Infrastructure Fundamentals Digital Badge

Network Infrastructure Fundamentals Topics:

- **▶** Basic Network Functions
- **▶** Networking Technologies
 - ► Ethernet, Passive Optical Networks (PON) and other distribution methods
 - WiFi
 - ► Cellular infrastructure
 - Audio visual
 - Security
 - ► Internet of Things (IoT)
 - Smart environments

- **▶** Data Communications Principles
- Networking Protocols
- **▶** Physical Infrastructure
- ► Service Assurance and Maintenance
- **►** Sustainability Practices