

# Data Center Fundamentals (DCF®)

## De-mystify the complex world of data centers. Gain a structured overview of the data center environments and key operational aspects.

## **Program Overview**

Data centers play such significant roles in our business and personal lives, yet not many people really know what they are. Often referred to as "the cloud" where our data is stored and processed, they are much more than this; they power the internet giving us the ability to pay bills online, access our emails, obtain money from ATM machines, watch movies, communicate around the world and to carry on what is now considered a normal, fiercely technological lifestyle.

This program has been designed to help de-mystify the complex world of data centers. It provides an overview of what data centers are, what they do and why we need them. Key aspects relating to basic design and design philosophies are also examined and the essential considerations of data center management such as

operational processes, energy management and facility management are explored along with their relationships to overall business strategy. The data center sector as a whole is also explained including the value of the sector today, the significant growth it has experienced and how this will continue in the future.

This program is available either as a fully video narrated 8 hour distance learning program or as a 1 day Instructor-led remote attendance program. For the distance learning program study can be undertaken at your convenience over a period of time. Once booked, an online link with a password is sent to you which unlocks the relevant material for you to start your study.

## Data Center Fundamentals (DCF®) Topics

## What is a Data Center?

- ▶ Define a data center
- ▶ Identify the main data center types
- ▶ Identify the business service options
- ► Emerging delivery and future demands

## The Role and Objectives of a Data Center

- ▶ Driving factors for a data center
- ► Data center standards
- ▶ Data center availability models and considerations
- ► Location and building considerations

### **Design Overview**

- Criticality considerations and their relationship to business strategy
- ► The four key constraints (4Cs) power, cooling, IT infrastructure and space

## **Managing a Data Center**

- ▶ Regulations, best practices and operational processes
- ► Move, adds and change processes
- ▶ Efficient energy management
- ▶ Decommissioning processes
- ► IT and physical security

## The Data Center Industry and Market

- ► The size of the market
- ► Market drivers and trends
- ▶ Powering the internet



## The Global Leader in Technical Education for the Digital Infrastructure Industry

#### **Program Duration**

8 Hours Distance Learning or 1 Day Instructor-led

#### **Program Objectives**

To provide an overview of the data center sector, the functional requirements of the data center facilities, the key aspects of data center working infrastructure and their management, and the facility's relationship to the delivery business strategy.

## **Learner Profile**

This program has been designed for individuals who are either new to the data center sector (technicians with limited experience or exposure to data center facilities) or for those who sell products and services to the data center sector. 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.

## **Program Requirements**

Instructor-led: Learners are required to have:

- ► A webcam and microphone enabled laptop with unrestricted wireless internet connectivity and a pre-installed web browser
- A suitable application for opening and reading PDFs. Typically, your device's in-built PDF reader is sufficient

**Distance Learning:** As a distance learner you have access to an experienced and dedicated online support team during your program. Learners are required to have:

- ► A laptop or suitable device with unrestricted wireless internet connectivity and a pre-installed web browser
- ➤ A suitable application for opening and reading PDFs. Typically, your device's in-built PDF reader is sufficient

### Certification

- ► CNet Training certification
- Use of the official Data Center Fundamentals digital badge