# **DCT DATA CENTER ESSENTIALS**

Gain a clear understanding of the world of data centres their purpose, design principles, and management essentials, including operations, energy, and facility management aligned with business strategy.



**Duration: 1 Day** 

**Course Code: DCT-DC-ESS** 

# **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.

### Objectives:

- Different factors drive the need for a data center:
- Driving factors for a data center
- · Data center standards
- Data center availability models and cons

#### Pre-requisite

 There are no specific pre-requisites for this program however some awareness of the data centre industry would be advantageous.

### Target Audience

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

## **Course Outline**

#### MANAGING A DATA CENTER

For a data center to be effective and efficient in its operations, management is key, consider:

- Regulations, best practices, and operational
- processes
- Change management processes -MAC's.
- Efficient & efficient energy management
- Commissioning & decommissioning processes
- Information Technology & physical security
- management

# FACTORS ENHANCING DEPENDABILITY OF A DATA CENTER

- Ability to be relied upon
- Ability to be available as and when needed.
   Duplication of components
- Classification of data center Tier levels

### MAIN COMPONENTS OF DATA CENTER

- · I.T components
- Power components
- Cooling components
- Auxiliary components fire, security, BAS

## DATA CENTER ACTIVE EQUIPMENTS SPACES

- Data center spaces
- Recommended Layouts
- Space cleaning
- · Approach to commissioning

# MANAGING DATA CENTER SUPPORTING SPACES

- Cooling system spaces
- Power system spaces
- Fire protection spaces
- Network infrastructure spaces General offices & security spaces

# MANAGING DATA CENTER SECURITY, SAFETY, NETWORK & I.T

- Safety precaution measures
- Managing Security
- Managing Fire protection
- Managing network
- · Managing I.T infrastructure