

# Certified Data Centre Technician - CDCT™

## Course Overview

With the mission critical nature of a data centre, it is paramount that those personnel selected to undertake work in this environment possess skill levels of the highest calibre. The consequences in a data centre are significantly greater than in a generic office environment and there are many issues that could be encountered by the unwary data centre technician on a day to day basis which could result in service interruptions and downtime. Whether dealing with move and change requests (MACs), carrying out routine inspections or resolving fault conditions, it is important to do so efficiently and in a time critical manner.

This course discusses the wide range of potential hazard and identifies best practises to be applied to ensure consistency and adherence to procedures and to help the data centre technician to avoid becoming the single point of failure (SPOF) in the data centre.

## Course Content

### Data Centre Fundamentals

- ▶ Standards
- ▶ Equipment trends
- ▶ Availability classifications

### Equipment Configuration

- ▶ Computer room equipment
- ▶ IT connectivity

### Cabinet Layout

- ▶ Security & safety
- ▶ Clearance & accessibility
- ▶ Airflow management
- ▶ Cable management

### Close Control Air Conditioning

- ▶ Air-conditioning basics
- ▶ Hot-aisle/Cold-aisle layout
- ▶ Containment options
- ▶ Cabinet cooling options

### Electrical Power

- ▶ Standards and Regulations
- ▶ Basic electrical concepts
- ▶ Power distribution in the data centre

### Earthing & Bonding

- ▶ Standards and Regulations
- ▶ Earthing requirements
- ▶ Signal reference grid (SRG)

### Cable Distribution

- ▶ Separation of services
- ▶ Distribution choices
- ▶ Fill ratio
- ▶ Fire containment

### ESD

- ▶ Causes of ESD
- ▶ Controlling ESD

### Administration

- ▶ Infrastructure management
- ▶ A practical framework

### Health & Safety

- ▶ Standards and Regulations
- ▶ Responsibilities of all parties
- ▶ Guidance on safe working with respect to noise, lifting, confined spaces, electrical, laser, optical fibre, ladders, holes etc.
- ▶ Use of personal protective equipment

### Security, Monitoring & Alarms

- ▶ Security system basics
- ▶ Infrastructure and architecture impact
- ▶ Impact of operational procedures
- ▶ Access control
- ▶ CCTV in a data centre

### NCI Maintenance

- ▶ Reasons for maintenance
- ▶ Cooling
- ▶ Power
- ▶ Life safety systems

## 3-day course

Classroom based with instructor led discussion and ongoing assessments

### ▶ Qualification

CNet certificate  
BTEC  
BICSI CECs RCDD 19, RITP 19, NTS 19,  
ITS2 15,  
TECH 18.

### ▶ Who Should Attend

Any individual involved or responsible for the day to day activity in an existing Data Centre or those looking at moving to work in a business critical data facility

### ▶ Related Training

Certified Data Centre Design - CDCD™  
Data Centre Cooling - DCCT™  
Data Centre Power - DCPT™  
Data Centre Management - DCM™  
Data Centre Efficiency - DCE™  
BICSI ITS Technician  
BICSI ITS Installer Level 2  
Fibre Optics In Internal & External Environments  
Advanced Testing of Fibre Systems  
Design & Advanced Testing of Copper Systems

### ▶ Course Objectives

This 3 day course identifies and addresses the key issues that could be encountered by the data centre technician on a day to day basis and gives guidance on how to avoid the consequences of getting it wrong.

### ▶ Prerequisites

It is expected that the student will have some prior understanding of his/her area of operation, whether this is in IT or Facilities. Experience of the data centre environment is preferred.