



**Certified Data Centre
Technician Professional**

**BTEC Level 4
Professional Award**

The **Global Leader of Technical Education and Training**
for the **Data Centre & Network Infrastructure** Sectors



Certified Data Center Technician Professional (CDCTP®)

5 DAY PROGRAM

Split into:

- ▶ 3 Day Core Unit (CDCTP®)
- ▶ 2 Day Professional Unit (CDCTP®)

Combined: 70% Theory 30% Practical

The CDCTP® Program consists of 334 pages of rich technical content.

You must successfully complete the (CDCTP®) core unit before moving on to the (CDCTP®) professional unit.

Student Profile

This program has been specifically designed for individuals wishing to acquire skills of the highest calibre in order to carry out their Data Centre related activities. CDCTP® certification is beneficial to technical personnel who are responsible for the day-to-day smooth operation of the mission critical facility.

Pre-Requisites

Experience of working within a Data Centre environment is essential.

Program Requirements

Students are not required to bring anything.

Program Objectives

CDCTP® certified individuals possess the knowledge, expertise and skills that are considered essential in ensuring that a Data Centre facility is operated and maintained to the highest possible standards.

Qualification

- ▶ Internationally and industry recognised
Level 4 BTEC Professional Award

Certification

- ▶ Official Certified Data Centre Technician Professional (CDCTP®) certification
- ▶ Use of CDCTP post nominal title
- ▶ Use of the CDCTP® logo

Certifications are a commitment to life-long learning and offer the perfect portal to ensure knowledge, skills and certification remain current and up-to-date. Each certification gained requires re-certifying every three years via a simple online system.

Additional Awards

- ▶ Continual Professional Development (CPDs)

Certified Data Centre Technician Professional (CDCTP®)

Program Overview

Learn how to increase the operational capability and productivity of the Data Centre to continually meet the demands of the business.

The Certified Data Centre Technician Professional (CDCTP®) program is aimed at the numerous technicians across the spectrum of mission critical Data Centre facilities. It provides a holistic understanding of the key environments and their dependencies and inter-dependencies they have upon one another.

The program has been designed to address the need for a designation that allows individuals to demonstrate unrivalled levels of skill and knowledge and to assist them to become key operational assets in their organisation and Data Centre facility.

Ensuring zero downtime within a mission critical Data Centre environment involves having highly competent technicians who demonstrate unrivalled technical knowledge and skills. Those with CDCTP® certification are increasingly seen as a vital component to the smooth running of any Data Centre operation and this program gives students the ability to identify, decipher, impact assess and remedy potential problems quickly, decisively and accurately.

This program addresses the wide range of subjects relevant to the Data Centre technician including a detailed breakdown of the key operating environments (power, cooling, IT and supporting systems), the necessary operational policies, procedures and compliance based on legislation, Standards (National & International) and codes of conduct, as well as detailed analysis of current measuring, monitoring and auditing techniques.

This is a content rich program where the technical content is continually updated to reflect developments covering installation, maintenance (routine and preventative planned) and decommissioning working practices. The CDCTP® also takes into account the requirements of the BS EN 50600 and TIA 942-A standards, industry best practice documentation and codes of conduct.

The CDCTP® program is classroom based and led by one of CNet Training's expert instructors.

“The CDCTP® program was excellent, got everything I wanted from the program. The Instructor was very helpful and delivered the program excellently.”

DATA CENTRE TECHNICIAN

Core Unit

Data Centre Fundamentals

- ▶ What is a Data Centre?
- ▶ Understanding the basic design requirements
- ▶ Building considerations
- ▶ Availability and resilience measures and practices
- ▶ Data Centre capacity planning

The Physical Infrastructure

- ▶ Physical infrastructure components
- ▶ Servers, software & services
- ▶ Storage infrastructure
- ▶ IT security
- ▶ Physical security & access control
- ▶ Power infrastructure
- ▶ Cooling infrastructure
- ▶ Overview of different cooling system technologies
- ▶ Supplemental cooling options
- ▶ Chilled water system

Working in the Data Centre

- ▶ Bridging the gap between IT & facilities
- ▶ Operational processes and procedures
- ▶ Data Centre monitoring
- ▶ Capacity management
- ▶ Asset management
- ▶ Management tools, administration
- ▶ Environmental health & safety
- ▶ Equipment configuration
- ▶ Change management
- ▶ Energy efficiency
- ▶ Life safety systems
- ▶ Business continuity/disaster recovery

Data Centre Maintenance

- ▶ Why do maintenance?
- ▶ Preventative maintenance
- ▶ Predictive maintenance
- ▶ Reliability centred maintenance
- ▶ Condition-based maintenance
- ▶ Power system maintenance
- ▶ Generator preventative maintenance
- ▶ Cooling system maintenance
- ▶ Chiller preventative maintenance
- ▶ Cooling tower water treatment
- ▶ Fire protection system maintenance
- ▶ Control and monitoring system maintenance
- ▶ Data Centre cleaning

Professional Unit

Advanced Power

- ▶ Power infrastructure
- ▶ Service entry switchgear
- ▶ Transfer switch
- ▶ Emergency power source
- ▶ Uninterruptible Power Supply System (UPS)
- ▶ UPS batteries
- ▶ Power distribution in the Data Centre
- ▶ Back-up power infrastructures

Advanced Cooling

- ▶ Data Centre cooling infrastructure systems
- ▶ Cooling architectures
- ▶ Air cooling
- ▶ Economiser modes
- ▶ Liquid cooling
- ▶ Chilled water plant
- ▶ Cooling towers
- ▶ HVAC efficiency and Power Usage Effectiveness (PUE) relationship

Compliance and Standards

- ▶ Legislation - data related
- ▶ Legislation - non data related
- ▶ Standards - data related
- ▶ Standards - non data related
- ▶ Codes of conduct
- ▶ Business continuity/disaster recovery

Audit Principles

- ▶ Audit process
- ▶ Types of Data Centre audits
- ▶ Impact of operational procedures
- ▶ The scope of the measuring & monitoring
- ▶ Measurement methods
- ▶ Metrics
- ▶ Best practices

There are a number of group and individual case studies throughout this program

“ The CDCTP® program was well organised and delivered by my Instructor. The workshop was really good for demonstrating what was taught in the classroom. ”

DATA CENTRE SPECIALIST

