MANAGEMENT

CDCMP®

Certified Data Center Management Professional

Pearson BTEC Level 5 Professional Award

5 Day Program

Certified Data Center Management Professional (CDCMP®)

Gain unparalleled knowledge, skills and competency to manage the complex technical environments of a data center facility and the ability to optimize its effectiveness by driving efficiencies.

Program Overview

Create a credible business strategy and apply strong leadership to maximize the operational capability of the data center whilst continuing to meet the ongoing demands of the business.

The five-day Certified Data Center Management Professional (CDCMP®) is a comprehensive program that investigates the functionality of all elements of a data center facility and the relationships and dependencies between them, with a focus on maintaining consistent reliability, security and integrity of data and the availability of service.

Opening with a solid grounding in the basic design principles, the program progresses to provide an overview of the physical infrastructure elements, through to an understanding of the project management methodology required to deliver complex data center projects.

It also explores the efficient management of the often conflicting operational and maintenance demands required of the data center plant to continuously deliver the business needs. The challenges of regulatory compliance, data center strategies and audit demands are also thoroughly examined. Real-life case studies are used to demonstrate putting theory into practice.

A certified CDCMP® also considers the requirements for compliance, having a full understanding of national and international regulations, codes and standards. During the program, learners will be provided a valuable opportunity to access the latest industry standards.

The CDCMP® program is led by one of CNet's expert Instructors and is available via remote attendance or classroom-based.

CNet Training

The Global Leader in Technical Education for the Digital Infrastructure Industry

Program Duration

5 days requiring pre-class study of approximately 20 hours.

Program Objectives

Upon completion, successful learners will have an unrivaled knowledge of how to effectively manage a data center environment to optimize its effectiveness in a more efficient manner whilst meeting the strategic operational demands of the business.

Learner Profile

The program is designed for individuals wishing to enhance their ability to strategically manage, control and improve the operational effectiveness of a data center environment.

Pre-requisites

Experience of working within a data center environment is essential; preferably with two years experience in a technical IT or operations role. If you would like to discuss your experience or suitability for this program please contact us.

Program Requirements

Learners are required to undertake pre-class study, which is fully supported by an experienced and dedicated online support team.

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 reading/annotating PDFs and a suitable application for editing standard office documents such as Microsoft Word, PowerPoint, and Excel

Qualification

- Internationally and industry recognized Pearson BTEC Level 5 Professional Award in Certified Data Center Management Professional

Certification

- Official Certified Data Center Management Professional (CDCMP®) certification
- Use of the CDCMP post nominal title
- Use of the official CDCMP® digital badge
- Use of the CDCMP® logo

Certifications are a commitment to lifelong 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 an online learning management system.

Additional Awards

- Continual Professional Development (CPDs)
- 7 IEEE Continual Education Units (CEUs)

"What a fantastic program: great material, great Instructor and great in class network. It was also good to meet other industry professionals and discuss data center management practices."

CDCMP® Learner Comment

Certified Data Center Management Professional (CDCMP®) Topics

What is a Data Center?
- Data center definition
- Data center options
- Business demands
- Growth and demand challenges

Understanding Basic Design Principles
- Identifying the business need
- Building a business case
- National and international standards
- Site and building considerations
- Tier levels
- Criticality and availability
- Determining data center capacities

Physical Infrastructure
- Power infrastructure
- Static and automatic transfer switches
- Measuring and monitoring
- Cooling infrastructure
- Cooling management options
- Cable infrastructure considerations
- IT systems and services
- Storage management
- IT security
- Access and security

Implementing Data Center Projects
- Business case
- The project cycle
- prioritization of activities
- Triple constraints
- Customer value
- Quantitative risk analysis
- Rolling wave planning
- Decomposition
- Change management
- Documentation

Managing the Data Center
- Regulations, standards and processes
- Service management frameworks
- Service lifecycles
- OLA, SLA and KPIs
- Process and procedures:
  - Moves, adds, changes
  - Energy efficiency
  - System availability
  - Decommissioning
- Transformation programs
  - Consolidation
  - Visualization
  - Cloud computing
  - Relocation
- Data Center facility management
  - Facility operations
  - Building Management Systems (BMS)
  - Fire safety compliance
  - Fire suppression

Purpose
- The data center stack
- The key constraints (power, cooling, space and IT)
- System availability
- Efficiency metrics
- Importance of commissioning
- Importance of capacity management
- Managing initial design principles

Management of Processes
- Introduction to ITIL
- Key performance indicators (KPIs)
- RACI matrices

Management of People
- Appreciation of different skill sets
- Creating a multi-disciplinary team
- Constructing a data center team

Management of Plant
- Management of plant overview
- Power management
- IT environment management
- Cooling management

Energy Efficiency
- Understanding what is attainable and prioritization
- Efficiency demands
- Efficiency measures
- Validation of processes and procedures

Management of Services
- Management of SLAs
- Data center service management
- Automated tools
- Activity planning

Business Strategy
- Data center strategic context
- Strategic planning
- Drivers for the business and IT strategies
- The impact on the data center
- Aligning IT with the business strategy

IT Strategy
- The link between business and data centers
- IT strategy framework
- Portfolio management
- Execution plan

Supporting Strategies
- Strategic planning processes and techniques
- Supporting strategy examples
  - Power continuity
  - Cooling continuity
  - Finance
  - Fire safety
  - Security and access control
  - Business continuity/ disaster recover
  - Cleaning

Legislation and Regulations
- Data protection
- General data protection regulation (GDPR)
- Computer misuse act
- Freedom of information act
- Cloud service provider legislation
- Electricity regulations
- Electricity at work regulations, national electrical code
- Building and regulations
- Health and Safety
- Environmental legislation

Codes of Practice
- EU code of conduct
- DoE DCEP (Data Center Energy Practitioner) - Green Grid maturity model

Standards and Accreditations
- National and international standards
- Accreditations
  - Uptime Institute
  - Certified Energy Efficient Data Center Award (CEEDA)
  - Building Research Establishment Environmental Assessment Method (BREEAM)
  - Leadership in Energy and Environmental Design (LEED) ISO 50001 and 14001

The Audit Process
- What is an audit?
- Defining the business requirement
- What should be audited?
- Audit outcomes
- Potential risk evaluation

Auditing the Data Center Physical Infrastructure
- Audit guidance
- Site specific activities
- Evaluating the key environments
- Functional testing
- Trend analysis
- Recommended practices

Performance Audits
- Current industry metrics
- Modeling calculations
- Bin analysis

Environmental Audits
- The need to measure and monitor
- Site specific monitoring
- Energy use and monitoring

Asset Management
- Areas of asset management
- Asset management strategy and lifecycle
- Asset management tools

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

CDCMP® Benefits for Individuals

- The ability to develop a management strategy that aligns with the business operational requirements
- Recognizes the need to develop a multi-disciplinary team supporting all operational functions of the data center
- Can identify the processes within data center operations that ensure consistent reliability, security and integrity of data and the availability of service

CDCMP® Benefits for Businesses

- Establish confidence that the data center manager is competent to strategically manage data center processes and procedures through continual improvement planning to meet the operational demands of the business
- Confidence that the data center manager can build a strong team to effectively deliver all operational requirements to ensure maximum service uptime
- Ensures that service levels agreements and key performance indicators are consistently met, to establish and improve customer satisfaction