Leadership

CDCSP®

Certified Data Centre Sustainability Professional

BTEC Level 6 Diploma

CNet Training

Customer Focused ▶▶
Quality Driven ▶▶▶▶

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

"Education beats at the heart of Sustainability"
Andrea Illy

Certified Data Centre Sustainability Professional (CDCSP®)

Program Overview

Developing a sustainable data centre future involves meeting the needs of today whilst protecting the environment and resources for tomorrow.

The comprehensive Certified Data Centre Sustainability Professional (CDCSP®) program is designed to provide in-depth knowledge into the steps required to evaluate, analyse, plan, implement and monitor a sustainability strategy for data centre facilities and operational capability.

Achieving sustainability will be evaluated from all angles with the overarching requirement to ensure the critical data centre facility continues to meet the needs of the business. The importance of implementing the correct strategic vision and business drivers required to establish a well-balanced and structured approach towards sustainability is explored. From initial business case and operational analysis of power distribution, cooling systems and IT hardware, and potential operational risk, to design innovation and implementing initiatives whilst appreciating both the business and operational challenges that may occur during this process. Maintenance strategies, continuous planning cycles and critical analysis against identified targets are also explored, in addition to the need to demonstrate proven ROI whilst identifying and capitalising the business, customer, social and environmental benefits.

Program Structure

This one-year program is based around supported online distance learning via a learning management system, providing flexibility and complete interaction at every step of the program. Learners will commit to 380 hours (equivalent to approximately 10 hours of study to the program per week) during term time, however this study can be taken at your own pace and undertaken at a convenient time for you. However, the deadlines that are given for your assessed work are strict and must be met. Learners will be supported by the CNet Technical Team and dedicated Tutors with the aim of creating an enriched learning experience.

The program will involve case study exercises (requiring research), attendance of guest speaker webinars, undertaking research papers, participation in virtual panel discussions and a focused assessment paper.

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1 Year Distance Learning Program

Split into Three Terms:

▶ Term 1: **Understanding Sustainability and the Business Approach** (100 hours) Starts - 1 October 2018
▶ Term 2: **Technological and Operational Approach to Sustainability (120 hours)** Starts - 1 February 2019
▶ Term 3: **Implementing Sustainability** (160 hours) Starts - 1 June 2019

Learner Profile

This program is structured for senior data centre operational and facilities management, team leaders and senior engineers wishing to unite existing knowledge with new learning concerning achieving a sustainability focused strategy within their mission critical facility.

Program Requirements

As a distance learner, you will also need a suitable computer with internet connection, together with sufficient IT competence to make effective use of word processing, internet and email.

Pre-Requisites

At least five years' of verifiable experience within the operational data centre environment, including a good awareness of business and operational strategies, policies, processes and procedures, financial considerations, power systems, cooling systems and IT infrastructure.

Program Objectives

The CDCSP® is designed to utilise existing data centre skills, knowledge and experience combined with new learning centred around technical collaboration and innovative approaches targeting sustainability within a data centre facility and the creation and implementation of a long-term sustainability strategy to support the business.

Qualification

▶ Internationally and industry recognised BTEC Level 6 Diploma Certified Data Centre Sustainability Professional

Certification

▶ Official Certified Data Centre Sustainability Professional (CDCSP®) certification
▶ Use of CDCSP post nominal title
▶ Use of the CDCSP® 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 an online learning management system.

Additional Awards

▶ Continual Professional Development (CPDs)
▶ IEEE Continual Education Units (CEUs)

Topics at a Glance

Term 1 - Understanding Sustainability and the Business Approach

Number of hours: 100
- The need for sustainability and the impact upon the data centre sector
- A sustainable approach and the legislative drivers
- Corporate Social Responsibility (CSR) and the wider impact to the data centre sector
- Establishing a data centre baseline and maximising assets
- Understanding the business needs and data centre limitations
- Business and operational benefits created by sustainability
- Creating a sustainable ethos through the business
- Establishing a business case for sustainability
- Business approach to sustainability

Additional work involved:
- A series of case study exercises, that will require a level of personal research
- Attendance at a webinar (with guest speaker) or a virtual discussion panel

Learning Objectives
- Appreciation and evaluation of the wider implications of establishing a more sustainable data centre sector against the influences from both government and non-government organisational policies
- Alignment of data centre sustainability strategies to meet environmental, customer and social factors through Corporate Social Responsibility (CSR)
- Create an operational baseline to understand the current status of data centre energy inefficiencies and wastage, identifying and prioritising appropriate and attainable sustainability measures
- Identify the potential risks, challenges and benefits of implementing a framework to implement sustainable initiatives
- Create a structured business case through business core drivers, risk potential, collaboration and commitment to deliver sustainability targets and strategies

Term 2 - Technological and Operational Approach to Sustainability

Number of hours: 120
- The need for innovation and collaboration
- Reduction of human error by effective management and training
- Industry best practices and transformation programs
- Monitoring, analysis and automation of the physical infrastructure
- Evaluating traditional, alternative and renewable power sources
- Monitoring, analysing and optimising power distribution
- Monitoring, analysing and optimising cooling capabilities
- Monitoring, analysing and optimising IT hardware deployment
- Maintenance strategies
- Aligning the business, operations and technology to deliver a sustainable path for the future

Additional work involved:
- Contributing to tutorials and Moodle discussions
- Watching the recommended videos and webinars, and commenting on the learning points
- Produce a technical based paper to identify the merits of relevant sustainable data centre technologies
- Collaborating in a technical working group (3-4 learners)
- Attendance at a webinar (with guest speaker) or a virtual discussion panel

Learning Objectives
- Critically analyse the IT environment relating to own sphere of work, in particular learner's own organisation's technical platforms
- Assess the IT/IS infrastructure (hardware, public/private/hybrid cloud, operating systems, intelligent SAN, aaS, middleware/SOA), and the IT service processes used within learner's own organisation, particularly those associated with sustainability and efficiency including virtualisation, re-use/sharing, and closed loop strategies
- Compare and contrast the needs, objectives and constraints of the other disciplines and functions within the data centre
- Evaluate and apply national and international standards published by ISO, BSI, IEC, IEEE etc and Codes of Practice to build sustainability into the data centre
- Devise techniques for streamlining business processes

Term 3 - Implementing Sustainability

Number of hours: 160
- Corporate sustainability and the core drivers
- Strategic and sustainable planning
- Developing and implementing sustainable strategies
- The strategic planning process
- Projecting levels of sustainable achievement
- Obstacles and challenges
- Monitoring, analysing and reporting sustainability improvements
- Continuous sustainability planning
- Certifications, standards and industry accreditations

Additional work involved:
- Individual assessment paper (word count - 4,500)
- Group research and presentation work
- Attendance at a webinar (with guest speaker) or a virtual discussion panel

Learning Objectives
- Evaluate appropriate business strategies for the initiation and development of a sustainable data centre
- Create a clear business vision and sustainability framework against defined objectives and attainable targets through business collaboration
- Identification and mitigation of potential risks, obstacles and challenges relating to effective delivery of the business strategy and sustainability outcomes
- Appreciate the need for effective monitoring, analysing and reporting structures to evaluate the financial expenditure and operational productivity against the business drivers
- Identify and utilise industry recognised standards and accreditations providing direction for continuous sustainability initiatives