

Certified Data Centre Energy Professional (CDCEP®)

Duration: 5 Days Course Code: CDCEP

Overview:

Become an expert in data centre energy management.

Learn how to create an energy efficiency plan for your data centre. Includes creation, implementation, analysis and formulating recommendations with the ultimate objective of reducing energy use and cutting carbon emissions.

The Certified Data Centre Energy Professional (CDCEP®) program considers the global focus on how energy prices and environmental protection is driving the need to reduce energy wastage through greater efficiency. It is of utmost importance and an issue that continues to be foremost in the minds of those operating data centre facilities.

The five-day program teaches expertise in energy efficiency and provides the tools to make a significant contribution to the energy strategy and effectively deal with, and manage, energy related issues and deliver efficiencies.

Strategically plan, design and implement an energy plan for data centre facilities, focusing on energy efficiency. Learners will be introduced to current energy profiler tools and models to analyse site data and formulate a comprehensive action plan to implement real energy savings potential and capacity reclamation.

The use and distribution of power will be explored considering server and IT equipment, and how usage can quickly spiral out of control when it is not being measured, monitored and maintained correctly. In addition, the use of redundant and back-up power infrastructure will be analysed considering the power utilisation for air-conditioning, fire suppression, security, alarms and other supporting systems.

A certified CDCEP® also considers the requirements for compliance, having a full understanding of national and international regulations, codes, standards and the US DoE Data Centre Energy Practitioner (DCEP). During the program, learners will be provided a valuable opportunity to access the latest industry standards.

Following this program, you are encouraged to continue your professional development by advancing your knowledge and skills to gain further official certifications and qualifications by progressing through The Global Digital Infrastructure Education Framework which maps education programs to career advancement throughout the network infrastructure and data centre sectors.

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

Target Audience:

This program is targeted at individuals who are responsible for the management and use of energy within a data centre.

Objectives:

- Gain an unrivalled knowledge and forward-thinking approach to energy provision. Become an expert in the analysis of energy usage, identify opportunities for efficiencies, structure and implement a detailed energy efficiency plan.
- Strategy basics
- Know where you are
- Know where you want to go
- Develop action plans
- Implement plans
- Continuous improvement

Prerequisites:

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

Testing and Certification

Content:

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| Need for Energy Efficiency? | Site selection considerations | IT value |
| CO2 emissions issues | Energy efficiency considerations | Financial planning |
| Impact of increased energy demand | Energy Strategy | Total Cost of Ownership (TCO) |
| Data centre constraints | Energy efficiency policy | Codes ; Best Practice : |
| Corporate Social Responsibility | Energy efficiency strategy | DoE DCEP |
| Understanding Corporate Social Responsibility (CSR) | Energy action plan ; management review | EU Code of Conduct |
| Implementation of ISO 26000 | Energy Efficiency Plan | A Strategy for Energy Management : |
| Energy Audits | Elements of the energy efficiency plan | Energy management roadmap |
| Energy audit process | Continual monitoring | Energy management team |
| Primary audit environments | Delivery of the Energy Efficiency Plan | Energy awareness |
| Actions to improve energy efficiency | Deployment of the energy efficiency plan | Immediate Energy Actions (4C's) |
| Energy Evaluation | Measuring, monitoring and reporting | Importance of the four key constraints |
| Understanding energy consumption | Energy efficiency procurement | Identifying the immediate concerns |
| Identification of areas of concern | Site Specific Energy Audits | Actioning the immediate concerns |
| Evaluation and modelling sources | Audit direction | Medium-Term CAPEX Actions |
| Achievable Expectations ; Energy Forecasting | Site specific audit plans | IT measures |
| Achievable expectations | Key energy audit areas | Cooling measures |
| Industry best practices | Energy Use Systems | Power measures |
| Analysis and calculations | Major energy use systems | CAPEX ; ROI impacts |
| Forecasting growth | Energy profile changes | Long-Term CAPEX/OPEX Actions |
| Energy Metrics | Optimisation actions | Long-term power efficiency |

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| Need for metrics | System Specific Analysis | Long-term cooling efficiency |
| Current industry metrics | IT analysis | CAPEX ; OPEX evaluation |
| New proxy metrics | Power infrastructure analysis | Processes ; Procedures |
| Capacity Reclamation | Environmental analysis | Process ; procedure requirements |
| Understanding design parameters | Cooling analysis | Process ; procedure monitoring and control |
| Importance of the four key constraints | Analysis Toolsets | Future Technical Developments |
| Decommissioning | Data centre toolsets | New developing technologies |
| Capacity management | Active Energy-Efficiency Measures | Energy Efficiency Accreditations |
| KPIs ; Metrics | Establishing an energy baseline | Environmental accreditations |
| Defining KPIs | Measuring and monitoring | Energy accreditations |
| Selecting and preparing KPIs | Data analysis and energy plan preparation | Data centre energy accreditations |
| KPI measuring models | Real-time monitoring | There are a number of group and individual case studies to formulate energy efficiency plans throughout this program |
| Business Continuity | Return on Investment | |
| Business continuity considerations | Return on Investment (ROI) | |

Additional Information:

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

Learners are also required to bring a webcam enabled laptop or suitable device with unrestricted wireless internet connectivity, the latest internet browser and suitable applications for reading/annotating PDFs and editing standard office documents.

Further Information:

For More information, or to book your course, please call us on 00 20 (0) 2 2269 1982 or 16142

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