
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
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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:

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

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 00 966 92000 9278

training@globalknowledge.com.sa

www.globalknowledge.com/en-sa/

Global Knowledge - KSA, 393 Al-Uroubah Road, Al Worood, Riyadh 3140, Saudi Arabia