

Course Overview

Many business activities today are moving away from paper-based systems and towards the processing, storage and management of digital information. Therefore the data centre has become a critical part of the business function. In recent years we have experienced a period of major growth in data centre builds, due mainly to the ever increasing demands for data processing applications. This increase is being driven by many factors including to name just a few, online banking and shopping, electronic medical and other personal records, multimedia communication and entertainment packages offered by Internet Service Providers (ISPs).

Data centres need large amounts of power to drive both the IT equipment and the supporting infrastructure such as air conditioning, and with today's increasing energy costs and carbon emission concerns, data centre efficiency is paramount.

This one-day course will discuss these issues in detail and look at various ways in which more efficient data centre operations can be implemented.

All the Data Centre Courses have been fully updated to take into account the requirements of the 2009 EU Code of Conduct on Data Centres Energy Efficiency.

Power trends – an overview

- ▶ Past, current and future needs
- ▶ Alternative energy sources

Cooling trends – an overview

- ▶ Past, current and future needs
- ▶ Emerging cooling options

Power Usage Efficiency (PUE)

- ▶ Describing PUE
- ▶ Calculating PUE
- ▶ Implementing PUE

Data Centre infrastructure Efficiency (DCiE)

- ▶ Describing DCiE
- ▶ Calculating DCiE
- ▶ Implementing DCiE

The network critical infrastructure

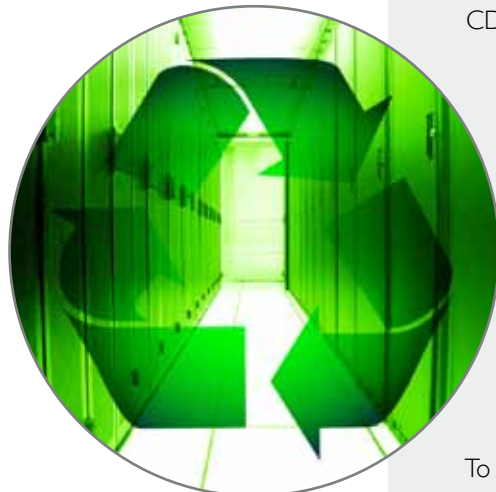
- ▶ Overview of network critical infrastructure components
- ▶ Heat and power contributions
- ▶ Efficient implementation of NCI

Modelling of data centre electrical efficiency

- ▶ Describing data centre efficiency
- ▶ Efficiency myths
- ▶ Useful energy versus waste energy

Implementing data centre electrical efficiency

- ▶ Power costs
- ▶ Energy use in the data centre
- ▶ Energy use in the IT equipment
- ▶ Energy use in the NCI equipment



80% Theory 20% Exercise

- ▶ **Qualification**
CNet certificate
BICSI CECs; 6

- ▶ **Who Should Attend**
Facilities Managers, Designers and Consultants, Anyone involved in managing existing data centres or looking at options for the future.

- ▶ **Related Training**
CDCDP™ - Certified Data Centre Design Professional
CDCD™ - Certified Data Centre Design
CDCT™ - Certified Data Centre Technician
Data Centre Cooling
Data Centre Power
Data Centre Management
BICSI ITS Technician
BICSI ITS Installer Level 2
Fibre Optics In Internal & External Environments
Advanced Testing of Fibre Systems
Design & Advanced Testing of Copper Systems

- ▶ **Course Objectives**
To discuss best practice in the implementation of energy efficiency models for data centres.

- ▶ **Prerequisites**
An understanding of the data centre power and cooling issues

- ▶ **Course Location**
EMEA & AsiaPac