



TYPE

Classroom

DURATION

21 Hours

LENGTH

3 Days

LEVEL

Practitioner

Energy Professional



Learn about the key considerations for near and long term target measures for data center energy efficiency enablement, alongside operation and design strategies that help maximize program impacts and increase cost-effectiveness, ensuring that capital investments deliver results.

Spanning Information Technology (IT) systems and their environmental conditions, air management and mechanical and electrical systems, on-site generation, metrics and benchmarking, this course offers strategies which provide efficiency benefits for a wide variety of data center scenarios.

Course Modules

1. Introduction to energy consumption, principles, units & metrics
2. The critical load, utilisation, virtualisation and management
3. Utility, carbon, emissions & on-site/off-site renewables
4. UPS, electro-chemical & kinetic energy storage
5. Emergency Power Generation, CHP & Utility support
6. Cooling: Direct-Air, Indirect-Air, liquid based & 'free-cooling'
7. Re-use of waste heat & other energy optimisation ideas
8. Monitoring, BMS, EMS and DCIM

Learning Objectives

- Alignment of the data centre business-case with the energy-plan
- Understand the principles of power and energy
- Identify and analyse energy sources & rank consumers in importance
- Identify embodied energy in consumable resources
- Understand the problems associated with partial-load
- Evaluate energy saving solutions and understand risks of implementation
- Calculate the carbon content of a data centre energy profile
- Create an input and output energy flow map for a particular facility
- Electrical systems, consumption and generation
- Cooling systems, technology and the effect of climate
- Understand the opportunities & limitations presented by waste energy re-use.

This course is part of the **Data Center Practitioner® track**.

Demonstrate your commitment to the industry and improve your career prospects by completing the DCP® track.

The course material covers all the fundamentals on how, why and where data centers are being built and students will spend 42 hours in a classroom environment with expert instructors and collaborating on course work with other industry peers gaining communal experience.

In addition students will be required to complete 16 hours of online learning to gain the Mission Critical Awareness Certificate.

Data Center Design Awareness

21h

Energy Professional

14h



Complete Modules 1-4 for
Mission Critical Awareness Certificate

Recognized by

