

Course Outline ::DCFC::

Module Title : Data Centre Foundation Certificate (DCFC®)

Duration : 2 days

Introduction

The data centre sector is a fast growing part of the overall ICT industry. Driven by the ever growing need of integrated communication solutions, social media, online content and cloud enabled infrastructure, the industry keeps growing at a very fast pace and more data centres are being built to enable this growth. Various industry reports indicate that there is a shortage of skilled data centre personnel. This shortage is created by the ever changing technology resulting in the current data centre personnel having "outdated" knowledge and skills as well as the expanding data centre market leading to a shortage of new data centre personnel. It is also often indicated by the industry that there is a gap between the skills of fresh graduates and the practical skills and knowledge required in today's data centre industry.

The Data Centre Foundation Certificate (DCFC[®]) is a 2-day course designed to deliver foundation knowledge about data centre facilities infrastructure. It provides participants with global overview and knowledge on data centres which will be of advantage to the participants who are looking at joining the ranks of professionals working in the data centre, ICT, infrastructure or the mechanical and electrical (M&E) design industries. It will also form a solid foundation for participants who wish to pursue his/her studies either academically or to further his/her industry specialisation with professional certification courses on data centre design/build, operations/governance and/or standards/compliance. With the tremendous growth of data and the data centres to support it, the demand for data centre professionals will grow in tandem.

Audience

The audience for this course is anyone who wants to acquire foundation level knowledge on data centre infrastructure. This course is ideally suited for data centre new hires, internal data centre support staff, IT support staff who work in the data centre, helpdesk staff, vendors/suppliers who install/maintain data centre equipment, building maintenance staff including data centre cleaners and other supporting functions, and fresh graduates. This course is also well suited for individuals working in data centre business support functions such as sales/pre-sales, HR, finance and business administration.

Course Syllabus

Introduction to Data Centres

- History of data centres
- Definition of different type data centres



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The Data Centre and its Relation to Business

Data Centre Standards

- List of standards
- Rating definitions

Data Centre Site Selection

Data Centre Facilities Areas

• Listing of all areas and their functions

Topology Designs

• Definition of Ratings

Components of the Power Infrastructure

- Utility power
- Transformers
- Generators
- Fuel systems
- ATS
- UPS systems
- Batteries
- Electric panels
- Cabling/busbar systems
- Power rails/strips

Lights

- Lights
- Emergency lights

Cooling Infrastructure

- Chillers
- DX Systems
- Evaporators
- CRAC/CRAU/HVAC
- Raised floor
- Non-raised floor
- Containment

ICT/Network Infrastructure

- Equipment racks
- Network cabling (fibre, copper)



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- Cable trays and pathways
- TIA-606 labelling

Data Centre Security

- Perimeter security
- Physical protection
- CCTV
- Access control
- Security management

Fire Suppression

- Detection systems
- Suppression systems
- Prevention systems
- Fire extinguishers
- Fire Safety

Monitoring and reporting

- DCIM
- EMS/BMS

Exam

Exam: Data Centre Foundation Certificate (DCFC®)

The DCFC[®] exam is a 60-minute closed-book exam with 40 multiple-choice questions. The candidate requires a minimum of 24 correct answers to pass the exam.

Certification and Accreditation

Candidates who successfully pass the exam will receive the official Data Centre Foundation Certificate. The certification is valid for three years after which the student needs to re-certify.

DFCF[®] is globally accredited by EXIN, a fully independent exam and certification institute.