



Kannegieter College provides the most relevant and real life Data Centre courses available in Europe. On this course, Technicians will gain a comprehensive understanding of every aspect of the Data Centre and its operations to help them carry out work in the Data Centre effectively and with minimal risk.

College

The skill and knowledge of today's Data Centre Technicians have a major impact on the smooth running of a Data Centre facility. With a thorough understanding of the physical infrastructure, issues can be identified and faults can be rectified quickly. In many cases, they can be prevented altogether.



Who should take this course

Students will probably be working in a data centre or have a desire to work in one.

Prerequisites

There are no formal prerequisites for the course.

What will you learn?

This comprehensive data centre technician course is designed to give technicians a comprehensive understanding of every aspect of the data centre and its operations including;

- What Data Centres do and the Different Types
- Understanding the 4 most important factors: Power, Cooling, Cabling, Premises
- Standards, Certification and Compliance
- The Physical Infrastructure in detail
- Key Operational Information and Parameters
- Important Processes and Procedures and the Technicians role within them
- What to Maintain, How and When
- Key Considerations When Installing new Equipment (IT and Infrastructure)

Course content

- Introduction to data centres
 - What is a Data Centre
 - Data centres vs computer rooms
 - Different types of data centre
 - The international data centre standards
 - Understanding Fundamental Design Principles
 - Certification
 - Compliance issues
 - Codes, Regulation and Best Practice
 - Understanding resilience models N, N+1, 2N, Tiers/Ratings/Classes etc.
 - Building requirements
 - Management Organisation
 - The roles of IT and Facilities
- The Infrastructure IT Systems and their correct installation

Understanding Efficiency Settings in IT Equipment

- Servers, Storage, Networking, IT Security
- Understanding Equipment Specifications
- How to Install Equipment Correctly
- Improving Airflow around IT Equipment

cursuscode KCO 0521

DCT | Certified Data Centre Technician Course



College

Course content

- Spaces and places
 - Understanding Location Issues
 - How location can reduce capacity
 - Different spaces in a data centre and their functions
- Raised access floors
 - Understanding floor strength
 - Standards
 - Correct sealing
 - Understanding the importance of floor heights
- Racks and computer room layouts
 - Hot and cold aisle concept
 - 7 and 8 tile pitch models
 - Server and communications racks
 - 2 and 4 post designs
- Power
 - Overview of power systems
 - Electrical Infrastructure components and paths
 - Power, kW and kVA
 - Power factor issues
 - Single v 3 phase distribution
 - Rating, Tier and Class 1-4 models
 - Backup Power Options: Generators and UPS
 - Looking after batteries and UPS
 - Power Distribution units
 - Earthing, grounding and bonding
 - Monitoring, Measurement and Periodic Testing
- Cooling
 - Air conditioning and cooling principles
 - Why we need cooling
 - Available technologies and how they work
 - Hot and cold aisle layouts and variations
 - The Importance of Airflow
 - DX v central water chiller options
 - ASHRAE, TIA and CIBSE requirements
 - Problems Caused by Low humidity
 - Ventilation and filtration requirements
 - Energy saving techniques e.g. dry cooler, air economiser, water economiser
 - International Differences: kW v tons v BTU of cooling
 - Hot aisle/cold aisle options
 - Enclosed cold and hot aisles
 - Other rack cooling options
 - Side to side cooling for large Cisco switches
 - Water cooled racks
 - CO2 cooled racks
 - Spot cooling
 - Rating, Tiering, Class requirements
 - Monitoring, Measurement and Period Testing
 - Efficiency Metrics

cursuscode KCO 0521



College

Course content

- Cabling
 - Cabling Solutions. Getting it right
 - Organising telecommunications rooms
 - Looking after the cables and containment
- Key Operational Parameters
 - Optimum running conditions
 - Understanding the limitations
- Processes and the Technicians role
 - Types of maintenance, Reactive, Preventative, Predictive
 - Checklists
 - Organising, recording maintenance and stock
 - What Infrastructure needs maintenance. What is needed and how often
 - Keeping it clean and general housekeeping
 - Monitoring
 - Using BMS and DCIM
 - Incident Management
 - Change Management
 - Change Approval
 - Permits to work
 - Risk Assessments and Method Statements
 - Acceptance of work
 - Asset and Configuration management
 - Keeping an asset register
 - Labelling and Documentation
 - Updating records and drawings

Get certified

If you complete this course and pass the exam you will be awarded a certificate and the right to use the DCT logo and the DCT designation after your name whilst your certificate is valid.

Praktische informatie



