TEKNOLOGISK INSTITUT

Kursus
2 dage
Nr. 90017 P

DKK 12.000
ekskl. moms

Dato	**Sted**
20-04-2020	Taastrup
28-09-2020	Taastrup

Certified Data Centre Professional (CDCP®)

Dette kursus er must-have for alle, som arbejder i eller omkring datacentre. Få en bred forståelse for et datacenters helt centrale elementer samt, hvordan du opsætter og forbedrer kerneaspekter som strøm, køling, kabling, sikkerhed og sikkerhedsforanstaltninger m.m. for at sikre et højt funktionsdygtigt datacenter. Vi gennemgår også de vigtigste arbejdsområder og vedligeholdelse heraf.Kurset afsluttes med en international eksamen i Certified Data Centre Professional (CDCP). Kurset afholdes på engelsk.

The CDCP is a must-have for anyone working in and around the data centre industry, whether a vendor/supplier, designer/builder, data centre owner/operator, those involved in daily operations of a data centre or a data centre user/customer. CDCP provides you with the knowledge of all aspects of the data centre and will enable you to talk confidently about the data centre with your colleagues, vendors, customers or your superiors. CDCP certification is a must have for your career in the growing data centre industry.

Forudsætninger

There is no specifc prerequisite for the CDCP course. However, participants who already have at least one or two years' experience in a data centre or facilities environment may be best suited. Those with no experience just yet are most welcome to participate.

Deltagerprofil

The primary audience for this CDCP training course is an IT, Facilities or Data Centre Operations professional working in and around the data centre (representing both end-customers and/or service provider/facilitators) and having

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responsibility to achieve and improve hi-availability and manageability of the Data Centre, such as: Data centre managers, Operations / Floor / Facility managers, data centre engineers, network/system engineers/data centre sales/consultants.

Udbytte

After completion of the course the participant will be able to:

- Choose an optimum site for mission-critical data centre based on current and future needs
- Describe all components that are important for highavailability in a data centre and how to effectively setup the data centre
- Name and apply the various industry standards
- Describe the various technologies for UPS, fire suppression, cooling, monitoring systems, cabling standards, etc, and to select and apply them effectively to cost-efficiently enhance the high-availability of the data centre.
- Review the electrical distribution system to avoid costly downtime
- Enhance cooling capabilities and efficiency in the data centre by using existing and new techniques and technologies for the increased cooling requirements of the future
- Design a highly reliable and scalable network architecture and learn how to ensure installers apply proper testing techniques
- Describe (high-level) data centre operational considerations supporting mission-critical environments
- Setup effective data centre monitoring ensuring the right people get the right message
- Ensure proper security measures, both procedural and technical, are established to safeguard your company's valuable information in the data centre

Indhold

- The Data Centre, it’s Importance and Causes for Downtime
- Data Centre Standards and Best Practices

Data Centre Location, Building and Construction

- Selecting appropriate sites and buildings and how to avoid pitfalls
- Various components of an effective data centre and supporting facilities setup

Raised Floor/Suspended Ceiling

- Uniform, concentrated and rolling load definitions
- Applicable standards

Raised floor guidelines

- Signal Reference Grid, grounding of racks
- Disability act and regulations
- Suspended ceiling usage and requirement

Light

- Standards
- Light fixture types and placement
- Emergency lighting, Emergency Power Supply (EPS)

Power Infrastructure

- Power infrastructure layout from generation to rack level
- ATS and STS systems
- Redundancy levels and techniques
- Three-phase and single-phase usage
- Power distribution options within the computer room
- Power cabling versus bus bar trunking

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- Bonding versus grounding
- Common Mode Noise and isolation transformers
- Distribution boards, form factors and IP-protection grades
- Power quality guidelines
- Real power versus apparent power
- How to size and calculate load in the data centre
- Generators
- Static and dynamic UPS systems, selection criteria, how they operate and energy efficiency option
- Battery types, correct selection and testing
- Thermo-graphics

Electro Magnetic Fields

- Electrical fields and magnetic fields definitions and units of measurements
- Sources of EMF
- Effects of EMF on human health and equipment
- (H)EMP
- Standards
- EMF shielding solutions

Equipment Racks

- Rack standards, properties and selection criteria
- Security considerations
- Power rail/strip options

Cooling Infrastructure

- Temperature and humidity recommendations
- Cooling measurement units and conversion rates
- Sensible and latent heat definitions
- Differences between comfort and precision cooling
- Overview of different air conditioner technologies
- Raised floor versus non-raised floor cooling
- Placement of air conditioner units and limitations to be observed
- Supplemental cooling options
- Cold aisle/hot aisle containment

Water Supply

- Importance of water supply and application areas
- Backup water supply techniques

Designing a Scalable Network Infrastructure

- The importance of a Structured Cabling System
- Planning considerations
- Copper and Fiber cable technology and standards
- ANSI/TIA-942 Cabling hierarchy and recommendations
- Testing and verification
- SAN storage cabling
- Network redundancy
- Building-to-building connectivity
- Network monitoring system requirements

Fire Protection

- Standards for fire suppression
- Detection systems

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- Various total flooding fire suppression techniques and systems, their benefits and disadvantages
- Handheld extinguishers
- Signage and safety
- Regulatory requirements and best practices

Physical Security and Safety

- Physical security considerations
- Physical safety considerations

Auxiliary Systems

- Data centre monitoring requirements
- EMS, BMS and DCIM
- Water leak detection systems
- Alarm notification

Operational Considerations

- Service Level Management
- Organisation
- Safety
- Security
- Facilities maintenance
- Monitoring
- Governance

Certificering

- **Questions**: 40 questions
- **Time**: 1 hour
- **Exam format**: closed book and multiple choice based

The passing mark is 27 out of 40.

Attendees passing the exam will be awarded the internationally accredited and recognized 'Certified Data Centre Professional' certificate (CDCP). The exam is included in the price.

CDCP certification is world-wide accredited by EXIN.

The CDCP certificate is valid for 3 years, after which recertification is required.

Underviser

Simon Besteman is a French and Dutch national and a veteran of the internet industri. He has more than 20 years' experience working at ISPs, suppliers, Data centres and hard-and-software vendors as a management consultant for a wide range of organizations. Simon is a Certified EPI Instructor for CDCP, CDCS, and CDFOM. He has conducted trainings in Europe, South Africa and Ethiopia for EPI and has always been given a good feedback from the course attendees.

Se vores øvrige kurser i data centre her.

Har du faglige spørgsmål så kontakt

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