



HP Education Services Course Description

Certified Data Center Expert (CDCE®) Training (HK260S)

The Certified Data Center Expert course is a five-day course designed to prepare participants to analyze a given business case and perform technical evaluation for a project plan and a set of designs for implementation of a mission critical Data Centre. The course also engages participants in product evaluations and demonstrates how to select equipment and develop equipment test scripts (IET) and integrated performance and validation testing (IPVT). CDCE® builds upon knowledge gained in CDCP® and CDCS® courses.

Audience

- The primary audience for this course is any IT, facilities or data center professional, who are involved in the design/build, renovation or relocation of a mission-critical data center.

Prerequisites

- Participants must hold a valid CDCS® certificate in order to register for the CDCE® class.

Delivery structure

- The courses are lectured by certified trainers. CDCE® is an instructor-led course that uses a combination of lectures and question-and-answer sessions, to discuss participants' specific needs and issues experienced in their own environment. The CDCE® course is approximately 60% hands-on and 40% lecture. Participants are able to tap into the trainer's extensive experience to enable them to solve practical problems in their current environment, thus adding tremendous value.

Course objectives

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

- Choose an optimum site for mission critical Data Centers based on current and future needs.
- Describe all components important for hi-availability in a Data Center and how to effectively setup the Data Center.
- Understand the design lifecycle stages for Data Center build projects and the phases involved in project execution.

Course title:	Certified Data Center Expert (CDCE®) Training
HP product number:	HK260S
Category/Subcategory:	Data Center / Design & Build
Course length:	5 days
Level:	Expert
Delivery language:	English
To order:	In HK, please contact HP Education Services on (852) 3070-6692 or email at hp-education.hk@hp.com or visit www.hp.com.hk/education Other countries please visit www.education.hp.com

- Analyze a business case and develop a project brief that is aimed at fulfilling the business resilience, site selection and design requirements for a fit-for purpose and suitably redundant mission critical Data Center.
- Conduct technical level design reviews for a given set of preliminary design documents and perform a technical compliance audit of a set of final design development documents compliant to TIA standards.
- Understand how to read electrical Single Line Diagrams (SLD) and other related design documents, and be able to detect the most common design mistakes.

- Evaluate product datasheets and discriminate among technical specifications and functional requirements for suitability against a set of given design requirements for a given site and business case.
- Correlate equipment specifications to site design constraints, such as room size and space, floor loading capacity, cooling capacity, power quality conditions and maintenance requirements while ensuring equipment selection does not compromise desired tier level compliance.
- Develop Individual Equipment Test (IET) and Integrated Performance and Validation Test (IPVT) plans for a mission critical Data Center.
- Develop guidelines and checklists for hand-over of a mission critical Data Center facility, its architectural, mechanical, electrical, IT elements and documentation.
- Develop retirement plans for decommissioning and hand-over of an aged mission critical Data Center facility.

Examination accredited by EXIN

- Part A is a 90-minute, 60 questions multiple choice and closed book exam and the candidate requires a minimum of 45 correct answers to pass the exam. Part B is a 90-minute, 25 open questions and closed book exam and the candidate needs to obtain a minimum of 75% to pass. Attendees passing the exam will be awarded the internationally accredited and recognized 'Certified Data Center Expert' certificate (CDCE). The certification is valid for three years after which the student needs to re-certify.

Benefits to you

- Understand the full project lifecycle to be able to implement, retire or move a data center.
- Receive training and advice from one of the industry's leading experts.
- Obtain the CDCE® certificate.

Why education services from HP?

- Global reach through 90 training centers in 45+ languages, with access to over 800+ experienced instructors.
- Job-focused courses on HP technologies leading to HP ExpertOne certifications.
- Wide range of education consulting services tailored to your specific needs to prepare you for IT transformation projects.
- Flexibility to learn through a wide variety of delivery modalities: traditional ILT (Instructor-led), VILT (Virtual instructor-led), SPEL (Self paced e-learning), games and simulations.

Next steps

- CDFOM® Certified Data Center Facilities Operations Manager (HK763S) course builds upon knowledge gained in CDCP/S/E® which addresses the operational aspects of running a Data Center. CDFOM® is an essential course for those who are expected to manage the daily operations of a mission critical Data Center.

Detailed course outline

Data Center Life Cycle

- Data Center lifecycle stages and phases
- Exercise: Stage/Phase/Milestone/Document mapping

Design Preparation

- Creation of a SON – Statement Of Need
- Technology review
- Conceptual sizing
- How to calculate for computer room space
- How to calculate facility space
- How to calculate incoming power
- Exercise: Conceptual sizing building and power
- Analysing capacity of existing facility
- Analysing investment options
- Site selection
- Permits and approvals
- Exercise: Site selection
- Conceptual design
- Budget and project timeline
- Business case preparation
- Project delivery structure
- Project management options
- Project manager and team

Design Planning

- OSRA – Operational Systems Requirement Analysis
- TFRA – Technical Facilities Requirement Analysis
- Operational and maintenance review
- RFP – Request For Proposal process
- Vendor Selection

Design Development

- Project Planning
- Design Development
- PDR – Preliminary Design Review
- Equipment selection
- FDR/V – Final Design Review/Validation
- Exercise: Full design validation of power, cooling, floor plans, fire suppression
- Design Freeze and LLIP
- Creation of construction documents
- BOM/BOQ – Bill Of Material / Bill Of Quantity
- Exercise: Equipment selection

Acquire

- Requirements of Purchase Orders
- Shipping Terms

- FWT/FAT – Factory Witness Test / Factory Acceptance Test
- Sequencing
- Incoming Goods Inspection and Handling
- Asset management

Construct

- Temporary Essential Services
- Erection of the building
- Permanent Essential Services
- Building Inspection
- Snag List
- COF – Certificate Of Fitness

Fit-Out

- Fit-Out
- Builders Cleaning
- As-Built Drawings

Test & Commissioning

- IET – Individual Equipment Test
- IPVT/IST – Integrated Performance Verification Test / Integrated Systems Test
- Common mistakes with IET/IPVT
- Deep Cleaning
- Exercise: IET/IPVT scripting

Hand-Over

- Facility Hand-Over requirements and documents
- PCC – Practical Completion Certificate
- DLP – Defect Liability Period
- Defect Management
- ICT Systems Installation
- ICT Systems Testing
- Hand-Over/DLP Expiry
- FCC – Final Completion Certificate

Retirement

- Reasons and definitions of retirement
- Building the business case and project plan
- Sequencing
- Transfer of Site
- Demolishing of Site
- Legal matters
- FCC – Final Completion Certificate

EXAM: Certified Data Center Expert

For more information

To locate country contact information and to learn more about education services, please visit our worldwide web site at <http://www.hp.com/learn>.

