



## Certified Data Centre Expert (CDCE)

CDCE is the premier certification for data centre professionals in the data centre design/build and related fields. This course is designed to prepare participants to analyse 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. Participants who pass the exam will join the industry's elite data centre project design experts.

CDCE is the highest level training in the EPI Design and Build training track under the EPI Data Centre Training Framework. Participants must hold a valid CDCS certificate in order to be able to register for the CDCE class.

### **Audience**

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

### **Pre-Requisites**

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

### **Topics Covered**

#### **Data Centre Life Cycle**

- Data centre 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
- Operations 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 LLTI
- 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