



# Certified Data Center Expert

## CODICE

CDCE

## DURATA

5 Giorni

## PREZZO

3.570,00€ (iva escl.)

## LINGUA

Inglese

## MODALITÀ

Virtual Classroom  
Corso in aula

## CERTIFICAZIONI ASSOCIATE

CDCE

## SCHEDULAZIONE

- 20/03/2023 Virtual Classroom
- 19/07/2023 Virtual Classroom
- 06/12/2023 Virtual Classroom

## PREREQUISITI

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

## OBIETTIVI

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

- Choose an optimum site for mission-critical data center based on current and future needs.
- Describe all components important for high-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.
- Analyse 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 amongst 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 Validation Test (IPVT) plans for a mission-critical data center.
- Develop guidelines and checklists for handover of a mission-critical data center facility, its architectural, mechanical, electrical, IT elements and documentation.
- Develop retirement plans for decommissioning and handover of an aged mission-critical data center facility.



## DESTINATARI

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.

## CONTENUTI

CDCE is the premier certification for data center professionals in the data center design/build and related fields. This 5-day 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 center.

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 center project design experts.

CDCE is the highest level training in the **EPI Design and Build training track** under the **EPI Data Center Training Framework**.

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### Module 1 Data Center Life Cycle:

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

### Module 2 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

### Module 3 Design Planning:



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

**Module 4 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

**Module 5 Acquire:**

- Requirements of purchase orders
- Shipping terms
- FWT/FAT – Factory Witness Test/Factory Acceptance Test
- Sequencing
- Incoming goods inspection and handling
- Asset management

**Module 6 Construct:**

- Temporary essential services
- Erection of the building
- Permanent essential services
- Building inspection
- Snag list
- COF – Certificate Of Fitness

**Module 7 Fit-Out:**

- Fit-Out
- Builders cleaning
- As-Built Drawings

**Module 8 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

**Module 9 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

**Module 10 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

*Prezzi e corsi potrebbero subire variazioni; si consiglia di verificare sul sito [www.novanext.it/training](http://www.novanext.it/training).*