Tytuł szkolenia: Certified Data Center Expert (CDCE®) Training with Exam

Kod szkolenia: HK260S

Wprowadzenie

The five-day course is designed to prepare participants to analyze a give business case and preform 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 integradet performance and validation testing (**IPVT**). **CDCE** bulids uopon knowledge gained in **CDCP®** and **CDCS®** courses.

Adresaci szkolenia

The primary audience for this course is any IT, facilites or data center professional, who are involved design/bulid, renovation or relocation of a mission critical data center.
Participants must hold a valid CDCS certificate (HK259S) in order to register for the CDCE class.

Cel szkolenia

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 lifecicle stages for Data Center bulid projects and the phases involved in project execution.
- Analyze a business case and develop the project brief that is aimed at fulfilling the business resilience, site selection and design requirements for a fit-for and suitably redundant mission critical Data Center.
- Conduct technical level design reviews for a given set of preliminary design documents and preform a technical compliance audit of a set of final development documents compliant to TIA standards.
- Understand how to read electrical Single Line Diagrams (SLD) and other related design documents, and be able to defect the most common design mistakes.
- Evaluate product datasheets and discrimate among technical specification and funcional requirements for suitability againts a set of given design requirements for a given site and business case.
- Correlate equipment specification to site design constraints, such a 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 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.

Czas i forma szkolenia

- 35 godzin (5 dni x 7 godzin), w tym wykłady i warsztaty praktyczne.

Plan szkolenia

Data Center Life Cycle

a. Data Center lifecycle stages and phases

b. Exercise: Stage/Phase/Milestone/Document mapping

Design Preparation

a. Creation of a SON - Statement Of Need
b. Technology review
c. Conceptual sizing
d. How to calculate for computer room space
e. How to calculate facility space
f. How to calculate incoming power
g. Exercise: Conceptual sizing bulding and power
h. Analyzing capacity of existing facility
i. Analyzing investment options
j. Site selection
k. Permits and approvals
l. Exercise: Site selection
m. Conceptual design
n. Budget and project timeline
o. Business case preparation
p. Project delivery structure
q. Project management oprions
r. Project manager and team

Design Planning

a. OSRA - Operational Systems Requirement Analysis
b. TFRA - Technical Facilites Requirement Analysis
c. Operational and maintenance review
d. RFP - Request For Proposal process
e. Vendor selection

Design Development

a. Project Planning
b. Design Development
c. PDR - Peliminary Design Reviev
d. Equipment selection
e. FDR/V - Final Design Review/Validation
f. Exercise: Full design validation of power, cooling, floor plans, fire suppresion
g. Design Freeze and LLIP
h. Creation of constrution documents
i. BOM/BOQ - Bill Of Material / Bill Of Quantity
j. Exercise: Equipment selection
k. Exercise: Equipment selection

Acquire

a. Requirements of Purchase Orders
b. Shipping Terms
c. FWT/FAT - Factory Witness Test / Factory Acceptance Test
d. Sequencing
e. Incoming Goods Inspection and Handling
f. Asset management

Construct

a. Temporary Essential Services
b. Erection of the building
c. Pernament Essential Services
d. Building Inspection
e. Snag List
f. COF - Certificate Of Fitness

Fit-Out

a. Fit-Out

b. Buliders Cleaning
c. As-Built Drawings

Test & Commissioning

a. IET - Individual Equipment Test
b. IPVT/IST - Integrated Performance Verification Test / Integrated Systems Test
c. Common mistakes with IET/IPVT
d. Deep Cleaning
e. Exercise: IET/IPVT scripting

Hand-Over

a. Facility Hand-Over requirements and documents
b. PCC - Practical Completion Certificate
c. DLP - Defect Lability Period
d. Defect Managemet
e. ICT Systems Instalation
f. ICT Systems Testing
g. Hand-Over/DLP Expiry
h. FCC - Final Completion Certificate

Retirement

a. Reasons and definitions of retirement
b. Builiding the business case and project plan
c. Sequencing
d. Defect Managemet
e. Transfer of Site
f. Demolishing of Site
g. Legal matters
h. FCC - Final Completion Certificate

EXAM: Certified Data Center Expert