



## CERTIFIED DATA CENTRE RISK PROFESSIONAL

### Introduction

Data centres are at the core of many organisations. Downtime, of applications or the data centre itself, could lead to major direct and indirect losses to the business. This has led many organisations to build resilience at various levels including the data centre infrastructure and the ICT layer. However, the fact is most companies are either overspending or underspending because they do not know the answer to basic questions such as 'what is the cost of downtime' whether per application and/or downtime of the data centre.

Without knowing the cost of downtime it would be impossible to determine what level of investment is justified to mitigate the risks of downtime. This has led to many data centres being built to the highest redundancy level defined by the ANSI/TIA-942 standard, whereas from a business perspective a lower redundancy level would have been enough.

Risk management is the process of identifying vulnerabilities and associated threats, followed by estimating the level of risk and its impact on the organisation. Based on international standards (ISO/IEC27001) and guidelines (ISO/IEC 27005, NIST800-30, ISO/IEC 31000), the Certified Data Centre Risk Professional course is a two-day course designed to expose attendants to the overall risk management process.

Focus is on the data centre infrastructure, the physical data centre facility and equipment. The attendant will learn how to identify and quantify risk in their organisation, creating the ability to reduce the risk to a level acceptable for the organisation to allow them to make sound investment decisions based on facts rather than emotions. CDRP® is a must for every organisation that wants to manage their risk without over spending.

### Roadmap



### Audience

The primary audience for this course is any IT, facilities or data centre operations professional who works in and around the data centre and who has the responsibility to achieve and improve the availability and manageability of the data centre. This represents both end-customers and/or service providers/facilitators. It is highly recommended for Data Centre Managers, Operations/Floor/Facility Managers, IT Managers, Information Security Managers, Security Professionals, Auditors, Risk Managers/Professionals responsible for IT/corporate governance.

### Prerequisites

There is no specific prerequisite for the CDRP® course. However, participants who have at least three years' experience in a data centre and/or IT infrastructures will be best suited. This experience may come from a business or IT background where the participant has knowledge of both environments, and understands the mission of their organisation. Attendance of CDCP® is beneficial but not a requirement.

### Global Accreditation & Recognition



### Course Benefits ✓

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

- ✓ Understand the different standards and methodologies for risk management and assessment
- ✓ Establish the required project team for risk management
- ✓ Perform the risk assessment, identifying current threats, vulnerabilities and the potential impact based on customised threat catalogues
- ✓ Report on the current risk level of the data centre both quantitative and qualitative
- ✓ Anticipate and minimise potential financial impacts
- ✓ Understand the options for handling risk
- ✓ Continuously monitor and review the status of risk present in the data centre
- ✓ Reduce the frequency and magnitude of incidents
- ✓ Detect and respond to events when they occur
- ✓ Meet regulatory and compliance requirements
- ✓ Support certification processes such as ISO/IEC 27001
- ✓ Support overall corporate and IT governance

- **Introduction to Risk Management**
  - Risk management concepts
  - Senior management and risk
  - Enterprise Risk Management (ERM)
  - Benefits of risk management
- **Data Centre Risk and Impact**
  - Risk in facility, power, cooling, fire suppression, infrastructure and IT services
  - Impact of data centre downtime
  - Main causes of downtime
  - Cost factors in downtime
- **Standards, Guidelines and Methodologies**
  - ISO/IEC 27001, ISO/IEC 27005, ISO/IEC 27002
  - NIST SP 800-30
  - ISO/IEC 31000
  - SS507
  - ANSI/TIA-942
  - Other methodologies (CRAMM, EBIOS, OCTAVE, etc.)
- **Risk Management Definitions**
  - Asset
  - Availability/Confidentiality/Integrity
  - Control
  - Information processing facility
  - Information security
  - Policy
  - Risk
  - Risk analysis/Risk assessment/Risk evaluation/Risk treatment
  - Threat/Vulnerability
  - Types of risk
- **Risk Assessment Software**
  - The need for software
  - Automation
  - Considerations
- **Risk Management Process**
  - The risk management process
  - Establishing the context
  - Identification
  - Analysis
  - Evaluation
  - Treatment
  - Communication and consultation
  - Monitoring and review
- **Project Approach**
  - Project management principles
  - Project management methods
  - Scope
  - Time
  - Cost
  - Cost estimate methods
- **Context Establishment**
  - General considerations
  - Risk evaluation, impact and acceptance criteria
  - Severity rating of impact
  - Occurrence rating of probability
  - Scope and boundaries
  - Scope constraints
  - Roles & responsibilities
  - Training, awareness and competence
- **Risk Assessment - Identification**
  - The risk assessment process
  - Identification of assets
  - Identification of threats
  - Identification of existing controls
  - Identification of vulnerabilities
  - Identification of consequences
  - Hands-on exercise: Identification of assets, threats, existing controls, vulnerabilities and consequences
- **Risk Assessment - Analysis and Evaluation**
  - Risk estimation
  - Risk estimation methodologies
  - Assessment of consequences
  - Assessment of incident likelihood
  - Level of risk estimation
  - Risk evaluation
  - Hands-on exercise: Assessment of consequences, probability and estimating level of risk
- **Risk Treatment**
  - The risk treatment process steps
  - Risk Treatment Plan (RTP)
  - Risk modification
  - Risk retention
  - Risk avoidance
  - Risk sharing
  - Constraints in risk modification
  - Control categories
  - Control examples
  - Cost-benefit analysis
  - Control implementation
  - Residual risk
- **Communication**
  - Effective communication of risk management activities
  - Benefits and concerns of communication
- **Risk Monitoring and Review**
  - Ongoing monitoring and review
  - Criteria for review
- **Risk scenarios**
  - Risk assessment approach
  - Data centre site selection
  - Data centre facility
  - Data centre monitoring
  - UPS scenarios
  - Force majeure
  - Organisational shortcomings
  - Human failure
  - Technical failure
  - Deliberate acts
- **Exam**
  - Sample questions
  - Self study (time permitted)
  - Exam: Certified Data Centre Risk Professional



## Delivery structure

EPI courses are lectured by certified trainers. CDRP® 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 CDRP® course is approximately 80% lecture and 20% hands-on. Participants are able to tap on the trainer's extensive experience to solve practical problems in their current environment, adding tremendous value.

## Examination

Certification exams are administered at the end of the last training day by an authorised training partner, either using paper-based or online format, depending on the country in which the course is delivered. The exam is a 60-minute closed book exam, with 40 multiple-choice questions. The candidate requires a minimum of 27 correct answers to pass the exam. Online exam results are known immediately and paper-based exam results will be known within one week.

## Certification

Candidates who successfully pass the exam will receive the official 'Certified Data Centre Risk Professional' certificate. The certification is valid for three years after which the student needs to re-certify. More information is available on the EPI corporate website at [www.epi-ap.com](http://www.epi-ap.com).

## Global Accreditation & Recognition

EXIN, is a global, independent and not-for-profit examination provider. EXIN's mission is to improve the quality of the IT and data centre sectors, the proficiency of IT and data centre professionals and the IT users, by means of independent testing and certification. EXIN offers candidates the opportunity to take examinations at a time and place of their choice. Every day, EXIN examinations are taken in more than 125 countries on six continents, and in more than 15 languages.

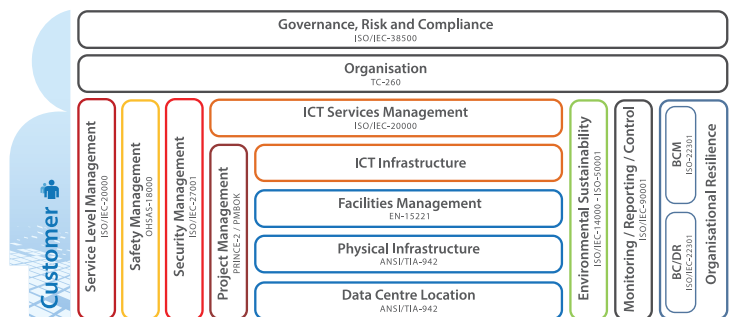
## Recommended next course

Candidates with a desire to gain better understanding and skills on IT Management are recommended to take the CITM® course. CITM® is designed to expose participants to all the key aspects of a Data Centre/IT Operations/Infrastructure department in a mission critical environment. It addresses the responsibilities of the modern IT Manager. To further extend your skills in the data centre design arena, the CDCP® course is recommended. CDCP® exposes participants to the key components of the data centre. For full course outlines visit the EPI corporate website, [www.epi-ap.com](http://www.epi-ap.com).

## Course schedule

Our courses are available in over 50 countries across all continents. For a comprehensive course schedule, visit the EPI corporate website at [www.epi-ap.com](http://www.epi-ap.com) or contact your local authorised reseller/partner.

## EPI Data Centre Framework®



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The EPI Data Centre Framework® provides data centre investors/owners/operators with a data centre ecosystem addressing all disciplines of a structured and fully managed data centre. The EPI Data Centre Framework® addresses not only the site selection, design and outfitting of its physical facilities but it also includes the governance and all processes required to organise and operate a data centre which meets the business requirements of its customers. For more information visit [www.epi-ap.com](http://www.epi-ap.com).



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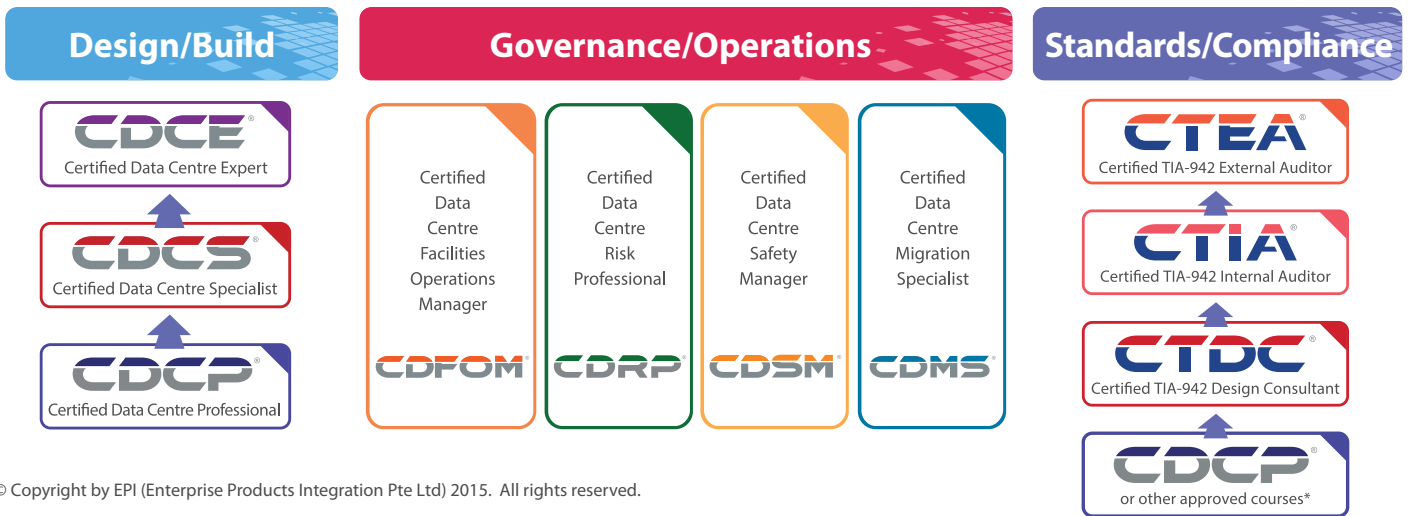
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Authorised Reseller/Partner:





## EPI Data Centre Training Framework®



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The **EPI Data Centre Training Framework®** provides a structured course curriculum for individuals working in and around data centre facilities and data centre operational management. It addresses the various disciplines required to design and manage a high-availability, efficient data centre. EPI's data centre course curriculum is not only the first in the world, it is also by far the largest in the industry. Many companies have specified these courses as prerequisites for their staff working in and around the data centre and use them as part of their career planning initiatives. Recognised globally, these certifications add value to both companies and individuals.

## The Company

EPI is a company of European origin operating world-wide in over 50 countries through direct operations and a large partner network. EPI offers an extensive range of data centre services on consultancy, auditing, certification and training. EPI's focus is on mission-critical, high-availability environments. Established in 1987, EPI has developed an international reputation for delivering high quality technical expertise, with flexible and innovative solutions, techniques and methodologies.

All our services are aimed at helping our customers to:

- Increase **Availability** of their mission-critical infrastructure
- Improve **Efficiency, Effectiveness and Manageability**
- **Minimise risk** of business interruption

Our Clients share a common need to protect their valuable data, run their mission-critical infrastructure efficiently and to be protected on a 24 x 7 basis. By protecting the interests of our customers, EPI is committed to an intensive program of comprehensive services development backed by engineering and support excellence.

Quality Systems and Procedures have always been at the heart of every stage of our service delivery to ensure consistent and high quality services. We are known for our thoroughness, flexibility and responsiveness in our project management. We focus on providing solutions that fit each organisation and each project with a drive to deliver quality on time, every time.

*Let us put our expertise to work for you!*

## Data Centre Services

### Consultation

- Data Centre Design Validation
- Data Centre Design Evaluation
- Data Centre Review/  
Independent Second Opinion

### Audit & Certification

- ANSI/TIA-942
- SS507
- ISO/IEC-27001
- ISO/IEC-20000
- DCOS®

### Professional Training & Certifications

- CDCP®, CDCS®, CDCE®, CDFOM®, CDRP®, CDMS®, CTDC®, CTIA®, CTEA®, CITP®, CITS®, CITE®

### Frameworks

- DCF® - Data Centre Framework
- DCCF® - Data Centre Competence Framework
- DCTF® - Data Centre Training Framework

### Standard

- DCOS® - Data Centre Operations Standard

