



# HP Education Services Course Description

Certified TIA-942 Design Consultant (CTDC®) Training (H7G61S)

In this three-day course, the participant will learn how to design an ANSI/TIA-942 compliant data center. It will provide a clear understanding of the requirements of the ANSI/TIA-942 Standard and possible implementation variations. This course is well suited for all types of data centers, be it enterprise data centers or multi-tenant, third party data centers such as co-location, managed services and cloud service providers.

## Audience

- The primary audience for this course is any professional involved in designing, building, maintaining and operating mission critical data centers and those who wish to attend the CTIA® (Certified TIA-942 Internal Auditor) course.

## Prerequisites

- Participants must possess a valid data center training certificate such as CDCP® or any other approved equivalent. Please submit a copy of your certificate for verification upon registration for the CTDC® course.

## Delivery structure

- The courses are lectured by certified trainers. CTDC® 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 CTDC® course is approximately 80% lecture and 20% hands-on.

## Course objectives

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

- Learn to properly comprehend and apply the ANSI/TIA-942 Standard requirements and guidelines.
- Understand the proper intent of the ANSI/TIA-942 Standard to avoid both over- and/or under-investment.
- Align the selection of redundancy levels and infrastructure investments to the business requirements.
- Understand the criteria and requirements for a high availability data center design and how to effectively establish the data center from the perspective of the ANSI/TIA-942 Standard.

<b>Course title:</b>	Certified TIA-942 Design Consultant (CTDC®) Training
<b>HP product number:</b>	H7G61S
<b>Category/Subcategory:</b>	Data Center / Standards & Compliance
<b>Course length:</b>	3 days
<b>Level:</b>	Advanced
<b>Delivery language:</b>	English
<b>To order:</b>	In HK, please contact HP Education Services on (852) 3070-6692 or email at <a href="mailto:hp-education.hk@hp.com">hp-education.hk@hp.com</a> or visit <a href="http://www.hp.com.hk/education">www.hp.com.hk/education</a> Other countries please visit <a href="http://www.education.hp.com">www.education.hp.com</a>

- Understand how the ANSI/TIA-942 standard relates to various worldwide standards

## Examination accredited by EXIN

- The 90 min closed-book certification exam consists of 60 multiple-choice questions. The candidate requires a minimum of 50 correct answers to pass the exam. Attendees who successfully pass the exam will receive the official 'Certified TIA-942 Design Consultant' (CTDC®) Certificate. The certification is valid for three years after which the student needs to re-certify.

## Benefits to you

- Understand more about all aspects of the ANSI/TIA-942 Standard.
- Receive training and advice from one of the industry's leading experts.
- Obtain the CTDC® certificate.

## Why education services from HP?

- Recognized as an IDC MarketScape leader for IT education ("Worldwide IT education and training 2013 vendor analysis" Cushing Anderson, IDC MarketScape, #239139, January 2013).
- Global training with more than 90 training locations worldwide.
- Unmatched technical expertise and support for HP products and technologies.
- HP MyRoom for real-time collaboration and Virtual Labs for a real hands-on experience.
- The training you need, when and where you need it with our Virtual Instructor-Led Training (VILT).
- Comprehensive curriculum of job-specific training leading to certification.
- Streamlined purchase and management of training with HP Care Pack Services for Education.
- Our HP Education Consulting team has delivered best-in-class tailored training solutions to clients for more than 30 years.
- One of the top 20 training and content development providers (TrainingIndustry.com - 2013).

## Next steps

- Certified TIA-942 Internal Auditor (CTIA) course (H7G62S)

## Detailed course outline

### Introduction to Data Center facilities

#### About the ANSI/TIA-942

- Life of the ANSI/TIA-942 Standard
- Relation to other standards
- Areas under scope
- High level redundancy definitions
- Redundancy options (N, N+1 etc.)
- Fault tolerant
- Concurrent maintainability
- Compartmentalization
- Examples of redundancy levels

### Data Center Space Planning

### Data Center Topologies

### Recommendations for Energy Efficiency

### Architectural

- Site selection
- Parking
- Multi-tenant building
- Building construction

### Building Security & Safety

- Security
- CCTV
- Staffing
- Bullet / ballistic proofing
- Lighting
- Safety

### Building and Room Access

- Security checkpoints
- Entry lobby
- Doors and Windows
- Exit corridors
- Shipping and receiving areas

### Room / Area Design Requirements

- Administrative offices
- Security office
- Operations center
- Restroom and break room
- UPS/Battery rooms
- Generator and fuel storage area
- Computer room

### Electrical

- Utility power
- HT/HV switch gear
- Generator and fuel supply
- LT/LV switch gear
- UPS and batteries
- PDU
- STS
- Grounding
- Surge protection
- EPO
- Central power monitoring
- Load Banks
- Testing
- Equipment maintenance

### Mechanical

- Environmental design
- Water cooled systems

- Air cooled systems
- HVAC control systems
- Plumbing
- Fire suppression
- Water leak detection

#### **Telecommunications**

- Network topology
- Redundancy level design
- Media and connectors
- Cabling pathways
- Detailed cabling design considerations
- Administration and labeling
- Cable testing
- Data center fabrics

#### **Exam**

- Exam: Certified TIA-942 Design Consultant

#### **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>.

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