

# Certified TIA-942 Design Consultant (CTDC) H7G61S

<b>HPE course number</b>	H7G61S
<b>Course length</b>	3 days
<b>Delivery modes</b>	ILT, VILT
<b>View schedule, local pricing, and register</b>	<a href="#">View now</a>
<b>View related courses</b>	<a href="#">View now</a>

In this 3-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.

## Why HPE Education Services?

- IDC MarketScape leader 4 years running for IT education and training\*
- Recognized by IDC for leading with global coverage, unmatched technical expertise, and targeted education consulting services\*
- Key partnerships with industry leaders OpenStack®, VMware®, Linux®, Microsoft®, ITIL, PMI, CSA, and (ISC)²
- Complete continuum of training delivery options—self-paced eLearning, custom education consulting, traditional classroom, video on-demand instruction, live virtual instructor-led with hands-on lab, dedicated onsite training
- Simplified purchase option with HPE Training Credits

## 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.
- Students will receive the latest digital copy of the ANSI/TIA-942 Standard. This is a single-user-license document, which the participant can access anytime on his/her computing device and can be printed (once). Extensive reference is made to the ANSI/TIA-942 Standard during the training. Therefore, participants are required to bring his/her computing device along for the training.

## Course objectives

After completion of the course, the attendee 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.
- Understand how the ANSI/TIA-942 Standard relates to various worldwide standards.

## Detailed course outline

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### Introduction to data center facilities

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#### 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
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#### Data center space planning

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#### Data center topologies

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#### Recommendations for energy efficiency

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#### Architectural

- Site selection
  - Parking
  - Multi-tenant building
  - Building construction
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#### Building security and safety

- Security
  - CCTV
  - Staffing
  - Bullet/ballistic proofing
  - Lighting
  - Safety
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#### Building and room access

- Security checkpoints
  - Entry lobby
  - Doors and windows
  - Exit corridors
  - Shipping and receiving areas
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#### Room/Area design requirements

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

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### Mechanical

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

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### Telecommunications

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

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### Exam: Certified TIA-942 Design Consultant

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## Examination accredited by EXIN

Certification exams are administered at the end of the last day of training, using paper-based or online format, depending on

the country in which the course is delivered. The exam is a 90-minute closed book exam, with 60 multiple-choice questions. The candidate requires a minimum of 50 correct answers to pass the exam. The certification is valid for three years after which the student needs to re-certify.

## Recommended next courses

CTIA Certified TIA-942 Internal Auditor (H7G62S).

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[hpe.com/ww/learndatacenter](http://hpe.com/ww/learndatacenter)

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c04567848, August 2016, Rev. 3