

Szkolenie: HPE  
Certified TIA-942 Design Consultant (CTDC®) Training with Exam



## Cel szkolenia:

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.

## 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.

## 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.

## Plan szkolenia:

- 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 and 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

## Wymagania:

- 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.

## Poziom trudności



## Certyfikaty:

Candidates who successfully pass the exam will receive the official 'Certified TIA-942 Design Consultant' certificate. The certification is valid for three years after which the candidate needs to re-certify.

## Prowadzący:

Authorized HPE Trainer.

## Informacje dodatkowe:

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.