

# Tytuł szkolenia: Certified TIA-942 Design Consultant (CTDC)

Kod szkolenia: H7G61S

## Wprowadzenie

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 asco-location, managed services, and cloud service providers.

## Adresaci szkolenia

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.

- Participants must possess a valid data center training certificate, such as CDCPor 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.

## Cel szkolenia

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.

## Czas i forma szkolenia

- 21 godzin (3 dni x 7 godzin), w tym wykłady i warsztaty praktyczne.

## Plan szkolenia

### Introduction to data center facilities

#### About the ANSI/TIA-942

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

#### Data center space planning

## **Data center topologies**

### **Recommendations for energy efficiency**

#### **Architectural**

- a. Site selection
- b. Parking
- c. Multi-tenant building
- d. Building construction

#### **Building security and safety**

- a. Security
- b. CCTV
- c. Staffing
- d. Bullet/ballistic proofing
- e. Lighting
- f. Safety

#### **Building and room access**

- a. Security checkpoints
- b. Entry lobby
- c. Doors and windows
- d. Exit corridors
- e. Shipping and receiving areas

#### **Room/Area design requirements**

- a. Administrative offices
- b. Security office
- c. Operations center
- d. Restroom and break room
- e. UPS/Battery rooms
- f. Generator and fuel storage area
- g. Computer room

#### **Electrical**

- a. Utility power
- b. HT/HV switch gear
- c. Generator and fuel supply
- d. LT/LV switch gear
- e. UPS and batteries
- f. PDU
- g. STS
- h. Grounding
- i. Surge protection
- j. EPO
- k. Central power monitoring
- l. Load Banks
- m. Testing
- n. Equipment maintenance

#### **Mechanical**

- a. Environmental design
- b. Water cooled systems
- c. Air cooled systems
- d. HVAC control systems
- e. Plumbing
- f. Fire suppression
- g. Water leak detection

#### **Telecommunications**

- a. Network topology
- b. Redundancy level design

- c. Media and connectors
- d. Cabling pathways
- e. Detailed cabling design considerations
- f. Administration and labeling
- g. Cable testing
- h. Data center fabrics

**Exam: Certified TIA-942 Design Consultant**