ATD
TIER

Accredited Tier Designer

UPTIME INSTITUTE ®

Accredited Tier Designer (ATD)

Gain the knowledge and expertise to design and engineer data centre facilities and systems to meet Tier Standards for uptime and performance. Armed with the Accredited Tier Designer (ATD) knowledge and skillset, you'll be equipped to design the premier facilities of the future.

Course Overview

Today's economy relies on digital platforms while users demand ever-more performance from data centre systems. The ATD course gives you the expertise to create those systems. The ATD course is intended for licensed Professional Engineers (PE) with a design management role for data centres and similar technology projects.

ATD teaches the multi-disciplinary knowledge you need to align facility design with Uptime Institute Tier Standard criteria and ensure that critical infrastructure and systems meet the owner's uptime and performance requirements.

ATD is a 16 hour course and accreditation examination covering design parameters for Tier-level data centre facilities and systems. The curriculum teaches both principles and practical application. Course material is technical and intended for engineers. A pre-requisite is the Professional Engineer (PE) credential in the U.S. or equivalent international registration.

The ATD course provides intensive instruction on the Tier Standard: Topology and its application to facility engineering and system designs — both for facilities that rely on traditional technologies, and those that incorporate the latest technologies and innovations.

Why the Accredited Tier Designer (ATD)?
The course crosses engineering discipline boundaries, covering topics including the mechanical and electrical infrastructure and ancillary systems, common design errors and omissions, and more. This course also includes a full design documentation review. The benefits of earning the ATD credential include:

- Reduce internal and client project costs by minimizing lost design
- Shorten design project time by limiting iterative designs
- Design firms can differentiate in the market and effectively compete for projects that require Tier compliance
- Apply Tier concepts effectively to deliver Tier Certified projects on time and on budget, earning client satisfaction and building your industry reputation

Course Duration

The course is 16 hours, live remote Instructor-led, of intensive instruction and hands-on exercises covering a multi-disciplinary curriculum, culminating in an examination.

Course Objectives

The ATD course provides an exhaustive overview of Tier design. Throughout this course, you will learn about introductory and complicated systems before reviewing certification submittals alongside mentors and groups. You will learn what makes a design system compliant or noncompliant and be able to judge the compliance of a system on your own accord.

Learner Profile

The ATD curriculum is intended for licensed Professional Engineers with a design management role for data centres and similar technology projects. The course provides the multi-disciplinary concepts necessary to achieve project design objectives based on the Uptime Institute Tier Standards criteria. The curriculum crosses traditional engineering-discipline boundaries, thus will suit design professionals who are responsible for project delivery.

Individuals who will directly benefit from the ATD course are:
- Engineers-of-record
- Design-build Team Senior Project Managers
- Project Owners' Senior Engineering Representative

Pre-requisites

This course is open to licensed professional engineers.

Certification

Successful completion of the ATD course, demonstrated through examination at the end of the course, will result in an Uptime Institute endorsement of the individual as an Accredited Tier Designer.

Costs & Credits

Professional course cost is US$4,985 per participant. This course is CPD accredited and may also qualify for your country's Professional Development Hours (PDHs) requirements (may not be applicable in all countries).

Accredited Tier Designer (ATD) Topics

Tier Classification System Overview
- Tier concepts and definitions
- Principal data center facility infrastructure systems

Mechanical Infrastructure Design
- Critical mechanical subsystems
- Redundant topology
- Continuous cooling

Electrical Infrastructure Design
- Critical electrical subsystems
- Multiple distribution path requirements
- Engine-generator (Power Station) requirements
- Electrical system interaction with mechanical systems

Ancillary System Tier Requirements
- Critical ancillary subsystems
- Ancillary subsystem impacts on Tier Classification System

Common Disqualifying Design Omissions
- Faculty-led review of common non-compliant design elements from certification submittals

Design Example Analysis Lab
- Mentored candidate group assessment of compliant and non-compliant tier design examples

Program Administration & Examination
- Overview of operational sustainability, and preparation for the exam
- Examination