



## Accredited Tier Professional (ATP)

*Expand your knowledge and expertise to create innovative mechanical & electrical solutions for your data center that meet Tier Standards.*

### Course Overview

Digital innovation never stops. As the global demand on data centers increases, critical infrastructure becomes ever more complex. The Accredited Tier Professional (ATP) course provides the advanced training needed to design world-leading innovative digital infrastructure environments. The ATP course is designed for Accredited Tier Designer or Accredited Tier Specialist alumni that are looking to expand their knowledge and take their careers to the next level.

The ATP course teaches advanced analysis, problem-solving, and design principles. These teachings equip you with advanced knowledge of Uptime Institute Tier Standards, providing detailed approaches to enable fast-tracked achievement of Uptime Design and Facility Certifications.

The ATP course is a 16 hour remote course and accreditation examination covering expanded mechanical & electrical solutions for data centers, as well as the creation and implementation of unique and challenging technologies. The curriculum teaches both principles and practical application. Course material is technical and intended for engineers with at least 24 months design experience in a data center or critical facility.

The ATP course provides advanced instruction on the Tier Standard: Topology and its application to facility engineering and system design.

### Why the Accredited Tier Professional (ATP)?

This course covers a comprehensive range of topics across the engineering discipline, including the mechanical & engineering infrastructure and ancillary systems, bringing existing knowledge up-to-date with modern and innovative advanced applications. The benefits of earning the ATP credential include:

- ▶ Increased competitive advantage in the market, enabling you to compete for Tier projects with the recognition of an ATP designation
- ▶ Learn how to reduce costs and shorten delivery times for clients by applying knowledge learned with advanced and innovative solutions to Tier Certification projects
- ▶ Work confidently with challenging and modern cutting-edge mechanical and electrical technologies

### Course Duration

The course is 16 hours, live remote Instructor-led, of intensive instruction and hands-on exercises, providing advanced analysis and detailed application of the Tiers and culminating in an examination.

### Course Objectives

With Uptime Institute's Accredited Tier Professional course, you can take the next step with your career by expanding your knowledge and expertise on advanced and innovative mechanical and electrical solutions for data centers that meet Tier standards.

### Learner Profile

Accredited Tier Designer and Accredited Tier Specialist alumni that are wanting to continue their learning will greatly benefit from this course. The ATP course is ideal for those wanting to stand out from their peers with an extra forward-thinking accreditation. It is also of great benefit for those involved in Tier Certification projects as the knowledge gained in the course will help to fast-track the organisation's achievements.

Individuals who will directly benefit from the ATP course are:

- ▶ Engineers-of-record
- ▶ Design-build Team Senior Project Managers
- ▶ Project Owners' Senior Engineering Representative
- ▶ Licensed Professional Engineers with a Design Management Role

### Pre-requisites

Graduation from Accredited Tier Designer or Accredited Tier Specialist is required. 24 months of design experience within a data center or critical facility is recommended.

### Certification

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

### 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 Professional (ATP) Topics

### Cooling Design Conditions

- ▶ Design conditions
- ▶ Reference temperatures
- ▶ Battery ventilation and cooling

### Cooling Load & Capacities

- ▶ Load considerations
- ▶ Terminal unit sizing
- ▶ Partitioned spaces
- ▶ Varying size configuration and redundancy

- ▶ Tank sizing and redundancy

### Electrical Loads & Capacities

- ▶ Distribution losses
- ▶ Transformer losses
- ▶ UPS losses
- ▶ UPS battery recharge
- ▶ Tolerances
- ▶ Sizing
- ▶ Capacity component rotation considerations

### Uninterruptable Power

- ▶ Small-format modular static UPS
- ▶ Static UPS load bus synchronization systems
- ▶ Rotary flywheels

### Specialized Cooling Technologies & Configurations

- ▶ Free cooling and economizers
- ▶ Hybrid cooling
- ▶ District cooling
- ▶ Special cooling solution

considerations

- ▶ Ducting

### On-site Power Generation & Storage

- ▶ Engine generators
- ▶ Gas turbines
- ▶ DRUPS
- ▶ Station batteries
- ▶ Renewable energy
- ▶ Fuel cells

### Ancillary & Control Systems

- ▶ Controls and ancillary

panels

- ▶ Motorized valves, leak detection, and drainage
- ▶ Engine-generator control systems
- ▶ Electrical control systems
- ▶ Proper means of isolation
- ▶ Other electrical considerations
- ▶ Transfer switches
- ▶ Switchgear construction

### Tier IV Considerations

- ▶ Continuous Cooling
- ▶ Compartmentalization
- ▶ Leak detection
- ▶ Cross-fed infrastructure

### Phasing and Multi-Tiers

- ▶ Phasing
- ▶ Multi-tier
- ▶ Tier Certification of Constructed Facility