

# Overview:

The DCT Data Center Power course dives more deeply into the electrical and power systems and components that support data centers. With data centers using about 5% of the world's energy and growing, these power systems are ever-expanding and improving. The Course covers the many aspects of the most typical electrical systems and equipment for data centers, including terminology, standards, acronyms, operation, efficiency, and more.

## **Target Audience:**

- Architects
- Engineering design professionals
- Facilities operations
- Contractors
- Technicians
- Electrical engineers, technicians, operators

## **Objectives:**

- Introduction to data center electrical and power systems
- Redundancy concepts for electrical distribution and equipment
- Understanding of electrical equipment, systems, and controls
- How differing priorties and data center types change the electrical design

### **Pre-requisite**

Basic understanding of data centers, layouts, and common terms

#### **Course Outline**

- Concepts, path of power, and diagrams typical electrical terms, power path from grid to chip, and redundancy levels
- Voltages and primary equipment AC/DC power, the major electrical equipment that supports all of the data center power needs
- UPS systems and components primary & secondary purposes, types, operations, and efficiencies
- Power distribution PDUs, RPPs, power monitoring, controls, receptacles & plugs
- Conductors, conduits and breakers protection devices, standards, sizing, switches and other devices