



Data Center Energy Practitioner (DCEP)

Summary Program Description

September 11, 2024

Introduction

This summary description provides information about the US Department of Energy’s (DOE) DCEP certificate training program. The target audience is those interested in participating in the Program.

Main Objective of the Program

The main objective of the DCEP Program is to raise the standards of those involved in energy assessments of data centers to accelerate energy savings. The Program is driven by the fact that significant knowledge, training, and skills are required to perform accurate energy assessments in data centers. The Program will raise the confidence level in energy assessments.

For those who pass the exam(s), the Program will recognize them as Data Center Energy Practitioners (DCEP) by listing their names and contact information on this website as well as issuing certificates, but will not endorse any individual. The Program is for individuals only; the designation and the acronym “DCEP” may not be used for organizations, companies, or firms.

Program Tracks

There are two alternative Program tracks: Training track (training only) or Certificate track (training + exam). For required and recommended pre-qualifications, see Table 1.

Program Levels

The course has two levels. The Level 1 Practitioners (“**Generalists**”) will be expected to have a good understanding of three data center disciplines (HVAC, IT, and Electrical) to provide broad recommendations based on the high-level DC Pro Simulation Tool. The Level 2 Practitioners (“**HVAC Specialists**”, “**IT Specialists**”, and “**Electrical Specialists**”) address energy opportunities using the in-depth Air Management Simulation Tool, the IT Equipment Simulation Tool, and the Electrical Power Chain Simulation Tool, respectively.

Data Center Profiler (DC Pro) Tool and System Tools

DOE has developed energy software for data centers to evaluate major data center systems. These tools are an integral part of the DCEP Program. The system tools include the Air Management Simulation Tool, the IT Equipment Simulation Tool, and the Electrical Power Chain Simulation Tool.

Level	Pre-qualifications (Both Tracks)	Training (Both Tracks)	Exam/Test (Certificate Track)
<p>1: Generalist</p> <p>High-level knowledge in HVAC, Electrical, and IT-Equipment</p>	<p><u>One</u> of the following is recommended:</p> <p>2-year technical degree with 2 yrs Data Center design/operation experience</p> <p>2-year degree with 4 yrs Data Center design/operation experience</p> <p>5 yrs Data Center design/operation experience or related IT, Network, and/or Telecom experience</p>	<p>1-day training including the Data Center Profiler (DC Pro) Tool</p>	<p>Open-book exam/test</p>
<p>2a: HVAC Specialist</p> <p>In-depth knowledge in HVAC</p> <p>2b: IT Specialist</p> <p>In-depth knowledge in IT</p> <p>2c: Electrical Specialist</p> <p>In-depth knowledge in Electrical</p>	<p>Level 1 training is required</p> <p>Plus <u>one</u> of the following is recommended:</p> <p>4-year technical degree with 3 yrs Data Center design/operation experience</p> <p>2-year technical degree with 6 yrs Data Center design/operation experience</p> <p>10 yrs Data Center design/operation experience</p>	<p>2-day training including the Air Management Assessment Tool (HVAC Specialist)</p> <p>1-day training including the IT Equipment Tool (IT Specialist)</p> <p>1-day training including the Electrical Tool (Electrical Specialist)</p>	<p>Exam/test (HVAC Specialist)</p> <p>Exam/test (IT Specialist)</p> <p>Exam/test (Electrical Specialist)</p>

Table 1: DCEP Program pre-qualifications.

Exam/Test

All Certificate Track candidates must complete one, two, or three open-book exams (depending on course selections) with multiple-choice questions with a mix of problem solving and knowledge questions. The result is either Pass or Fail. The passing score is 75%. There is a waiting period of 30 days to retake the exam(s). Participants who pass the exam(s) will be designated DCEP at either Level 1 or Level 2 and will receive a Certificate. If a student receives a pass score on the Level 2 exam but failed on the Level 1 exam, he/she will not receive a certificate for either Level until he/she has received a pass score on the Level 1 exam. Participants of the Training Track will receive a Certificate of Participation.

How to Participate

To participate in a particular DCEP training, a candidate must submit an application and a training fee (see below) to the training organization.

Training Fees

- Generalist \$1,300
- IT Specialist \$1,400
- Electrical Specialist \$1,500
- HVAC Specialist \$2,400

Discounts

- Groups between 10 and 19 participants: 15%
- Groups larger than 19 participants: 20%
- Organizations with less than 20 employees: 15%
- Non-affiliated individuals: 20%
- Federal employees: 15%
- Multiple courses (2, 3, or 4): 15%
- Discounts cannot be combined.

Questions? Please contact:

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