

Validate your expertise

Recognized for continuing education credits by leading industry groups

DCU classes are a way to fulfill continuing education requirements in several areas of the data center and IT industry. The following organizations and boards give credit for completion of DCU courses:



IEEE - Each course is equivalent to one PDH.



IFMA - Certain courses are approved for credit for CFM/FMP maintenance points



IET - All courses are approved



CIBSE - Courses contribute toward the CIBSE CPD requirement



BiCSi - Specific courses are identified as one CEC for RCDD, NTS, and INS



HiMSS CPHIMS and CHS Certification - Specific courses are approved for one contact hour for renewal of CPHIMS and CHS licenses.

> To see available credit courses listed by industry group, visit www.datacenteruniversity.com and click on Professional Continuing Education.

State Engineering Boards

The following state boards recognize DCU courses for continuing education credits:

Alabama	Iowa	Missouri	New York	Tennessee
Arkansas	Illinois	Nebraska	North Carolina	Texas
Florida	Kansas	Nevada	Oregon	Utah
Georgia	Minnesota	New Hampshire	South Carolina	West Virginia

Data Center University Classroom Course Catalog

Advance Your Career



www.DataCenterUniversity.com/classroom



Data Center University also offers an industry-leading online learning resource at www.datacenteruniversity.com

For more information, email us at dcutraining@apcc.com

Data Center
University
by APC

Advance your career via the DCU classroom

Data Center University® offers industry-leading classroom instruction for anyone involved in the critical decisions and infrastructure planning of data centers – technologists, facilities managers, engineers, designers, and consultants. If you are an IT professional, DCU classroom learning will give you the foundational knowledge you need to participate in teams that design or upgrade the physical layer of a data center. It will also help you keep up to date on today's rapidly changing data center environments and technology.

Industry research indicates that by the year 2015, the talent pool of qualified senior-level technical and management data center professionals will shrink by 45%*. The lack of professional talent has created a looming skill shortage in the industry – and a clear opportunity for anyone willing to educate themselves about the latest data center solutions and trends.

* Source: Survey conducted by AFCOM's Data Center Institute (DCI)

DCU Courses

Power

- > Fundamentals of Power
- > Power Redundancy in the Data Center
- > Power Distribution I
- > Generator Fundamentals

Cooling

- > Fundamentals of Cooling I
- > Fundamentals of Cooling II
- > Advantages of Row and Rack-Oriented Cooling Architectures I
- > Optimizing Cooling Layouts for the Data Center

Rack

- > Rack Fundamentals

Cabling

- > Fundamental Cabling Strategies for Data Centers

Fire Protection

- > Examining Fire Protection Methods for Your Data Center

Security

- > Fundamentals of Physical Security

Management

- > Fundamentals of Availability
- > Physical Infrastructure Management Basics

Knowledge is power

DCU classroom instruction is offered in a three-day format, using exercises and examples to augment instructor presentations. DCU's expert training team offers classroom instruction at the Schneider Electric Technology Center in St. Louis and at various sites nationwide. At the completion of the three-day session, participants qualify to earn continuing education credits from a variety of industry groups. You also have the option of sitting for the DCU Associate Certification exam, administered administered at Prometric testing centers.

The demand for skilled data center professionals continues to grow. Earning DCU Associate Certification can significantly increase your proficiency and productivity, enhancing your professional value and advancing your career.



Power

Fundamentals of Power

Before you can understand the power needs of the data center, you must first understand the basic concepts and terms related to power measurement, electric power forms, and its generation. This elementary level course explains these power elements and highlights some of today's power problems.

Power Redundancy in the Data Center

This foundational course explores common commercial AC voltage types, transformers and turn ratios, K-rating and Delta-Wye configuration. It also discusses voltage distribution, current ratings, and electric fuses. Different types of circuit breakers, their sizing, and grounding requirements are also explained.

Power Distribution I

This course will explain and compare the various ways to provide electrical power to data centers and network rooms. Issues addressed include voltage, various types of transformers, service entrance, and the different power distribution/configuration models.

Generator Fundamentals

Understanding the basic functions and concepts of standby generator systems helps provide a solid foundation allowing IT professionals to successfully specify, install, and operate critical facilities. This course is an introduction to standby generators and the subsystems that power a facility's critical electrical loads when the utility cannot.

Cooling

Fundamentals of Cooling I

This foundational course explains the fundamentals of air conditioning systems, covering such topics as the refrigeration cycle, ideal gas law, condensation, convection and radiation, heat generation and transfer, and precision versus comfort cooling.

Fundamentals of Cooling II

This course expands upon the principles learned in Fundamentals of Cooling I. Topics include humidity, temperature measurement and control, humidification strategies and systems, demand fighting and methods used to prevent it, and appropriate operating thresholds for maximum efficiency and cost savings.

Advantages of Row and Rack Oriented Cooling Architecture I

This course will focus primarily on contrasting the three cooling architectures (room, row, and rack) and illustrate why row-oriented cooling will emerge as the preferred solution for most next-generation data centers.

Optimizing Cooling Layouts for the Data Center

This course discusses various types of cooling equipment, and deployment methods for optimal system performance and improved data center efficiency.

Rack

Rack Fundamentals

This course covers rack standards, rack types, and rack enclosures. It discusses best practices for rack system selection, and explores the physical considerations for rack layout.

Cabling

Fundamental Cabling Strategies for Data Centers

This course will address the basics of cabling infrastructure and will discuss cabling installation practices, cable management strategies, and cable maintenance practices. We will take an in-depth look at both data cabling and power cabling.

Fire Protection

Examining Fire Protection Methods for Your Data Center

This foundational course will introduce the basic theory, prevention, detection, and suppression of fire specific to data centers. At the completion of this course, you will have a better understanding of the safeguarding methods that are used to protect a data center's hottest commodity: information.

Security

Fundamentals of Physical Security

Today's Data Centers must consider not only network security, but also physical security. This course defines what physical security means for mission critical facilities and identifies what assets it needs to protect. Also discussed are the different means to control facility access, common physical security methods, security devices, and budget considerations related to physical security.

Management

Fundamentals of Availability

This course explores the dimensions of availability and measuring business value, costs due to downtime, calculating downtime, and factors that affect availability and reliability.

Physical Infrastructure Management Basics

This foundational module identifies the physical infrastructure challenges for incident, availability, capacity, and change management. It also explains basic information and strategies concerning: Physical Infrastructure Enterprise Management Systems, Building Management Systems, Element Managers, and Physical Infrastructure Element Manager.



DCU Associate Certification: A valuable professional credential

The DCU Associate Certification is an international credential that recognizes foundational knowledge in data center infrastructure. Participants cite DCU certification as an effective way to validate their expertise and advance their careers.

- > Provides a solid, marketable credential in a growing industry
- > Confirms professional credibility and qualification of experience
- > Increases knowledge, leading to improved job performance
- > Displays professional achievement, leading to better employment opportunities
- > Offers a viable career path tool for those seeking to advance their positions
- > Provides a benchmark measure of employee abilities for managers

DCU recommends the program of study represented by the courses in this catalog as preparation for Associate-level certification. For more information on the exam format, along with any current promotions, please visit our Web site at www.datacenteruniversity.com or email us at DCU.support@apc.com.

