OPTIMISING PEOPLE

10,000

Online training modules in 2015

200 PLUS

Professionals gained the DCS Credential

7,000+

People attended classroom training

38%

Organisations only invest in staff training after system downtime

93%

Of our students would take another course with their instructor

80% Of downtime is due to human error

55+ Years old—average age of datacenter engineering community

41% Employees at companies with inadequate training programs plan to leave
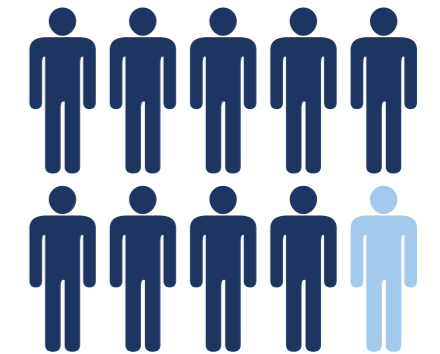Source: American Society for Training & Development

60% Of data center operators are concerned about an industry wide skills shortage
Source: DCD Global Census

$20million

An hour is the true cost of downtime to your business

DCProfessional Development (DCPro)

As a market leader in high-end multi-vendor data center training solutions DCPro provides extensive, globally accredited training options tailored to your organisation's needs.

From vendor-certified courses to customised technology training, including bespoke in-house developed courses, you can choose from the very latest data center learning and development courses. Courses are delivered and managed through the worlds' first Online Training Academy and Learning Management System

Our accredited Career Progression Framework has been enhanced to include our new Business Continuity Management and Open Compute Awareness Courses, alongside our new Health & Safety and Risk Management Modules.

We work closely with you to develop a customised training solution that caters to the ambitions and career roadmap of your employees, in line with your corporate and business development strategy.

With an integrated support infrastructure that extends across the Globe, led by highly qualified, vendor-certified instructors with technical expertise, linguistic proficiency and extensive hands-on experience. We can devise and scale up training solutions as quickly as your business can take on new staff, embrace new applications or develop new disciplines.

DCPro gives you the reassurance of standardised, relevant and recognised industry certification, that aligns with an organisations corporate and business development strategy.

The World's First Training Academy for the Mission Critical Sector

Reduce per-person training costs and provide cost effective continuing professional development (CPD) for your workforce.

- Up skill your employees
- Manage progress through powerful management and customised reporting tools
- Responsive design for desktop, tablet or phone – your staff can learn anywhere
- Develop tailored learning paths for individual employees
- Attract and retain your best talent
- Online content developed by industry experts
- Unlimited access to our comprehensive knowledge bank and training library
- Enhance your brand reputation–customise our Learning and Development portal with your organisation's branding

How It Works

A simple 3-step process makes it easy to develop your Training Academy and begin your training

1 DISCOVER YOUR REQUIREMENTS

Our Learning and Development specialists will work with you to assess your team's training requirements, benchmark their skills and define your training objectives.

2 BUILD YOUR TRAINING PROGRAM

With over 150 hours of expert online content, plus our specialist classroom courses to choose from, you can select the training programs that best support your business.
Covering topics such as:

- Mission Critical Awareness
- Health and Safety
- Business Continuity
- Data Center Design
- Energy Efficiency
- Cooling, Power
- Cost Management and many more

3 CHOOSE YOUR PLAN

We have packaged our solution into 3 plans:

- Professional
- Premium
- Enterprise

You select the plan that best fits your organisations' needs (and we can customise it further so it's tailored specifically for your unique requirements). You can even choose how and when you'd like to pay.

IEEE | ENGINEERING RCEP REGISTERED CONTINUING EDUCATION PROGRAM | CIBSE | ENGINEERS AUSTRALIA | BICSI | NYiT NEW YORK INSTITUTE OF TECHNOLOGY | professional engineers board singapore

Benchmarking Skills Assessment

Learning activities are underpinned by a Skills Assessment App that helps highlight an individual's knowledge gaps and suggests relevant training pathways.

Working with you, we will complete a gap analysis to define your employees' training needs. Our dedicated Skills Assessment App will help us to understand the current skills levels of your employees, enabling you to make informed decisions about your corporate training requirements.
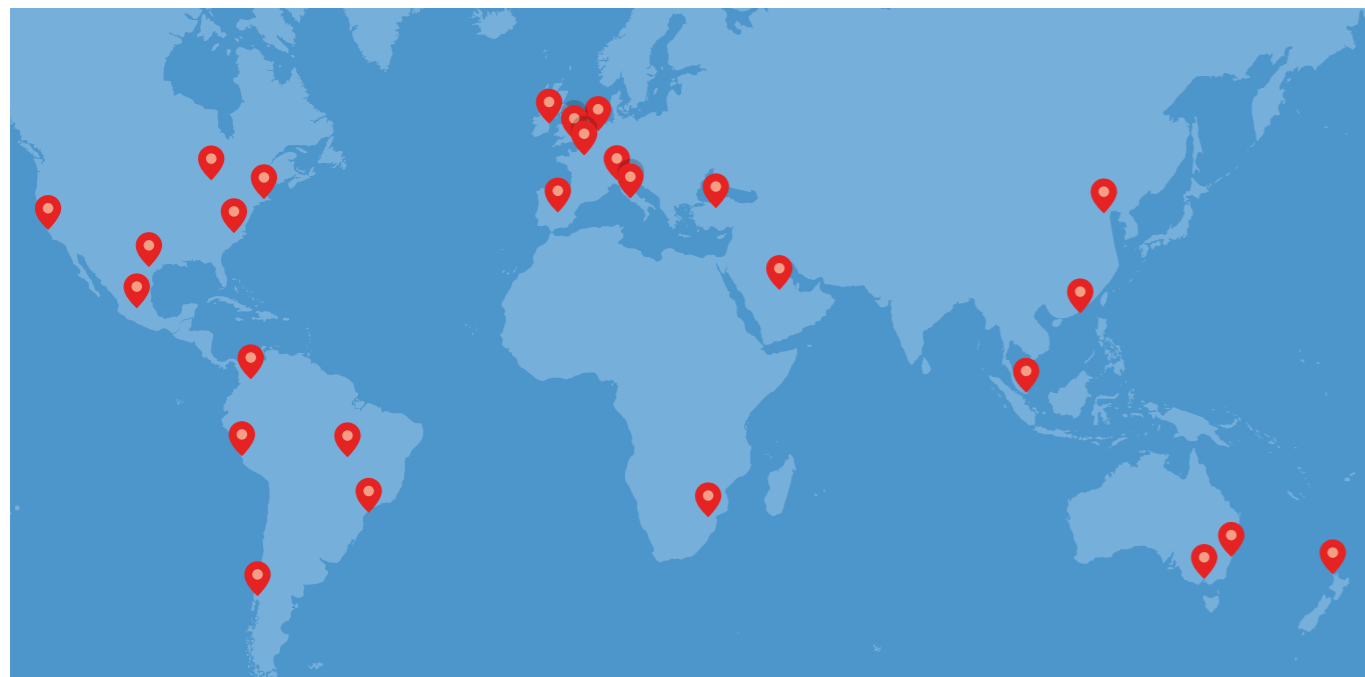
See where your facility ranks and how to future proof your data center's skill—take the online Skills Assessment App here:
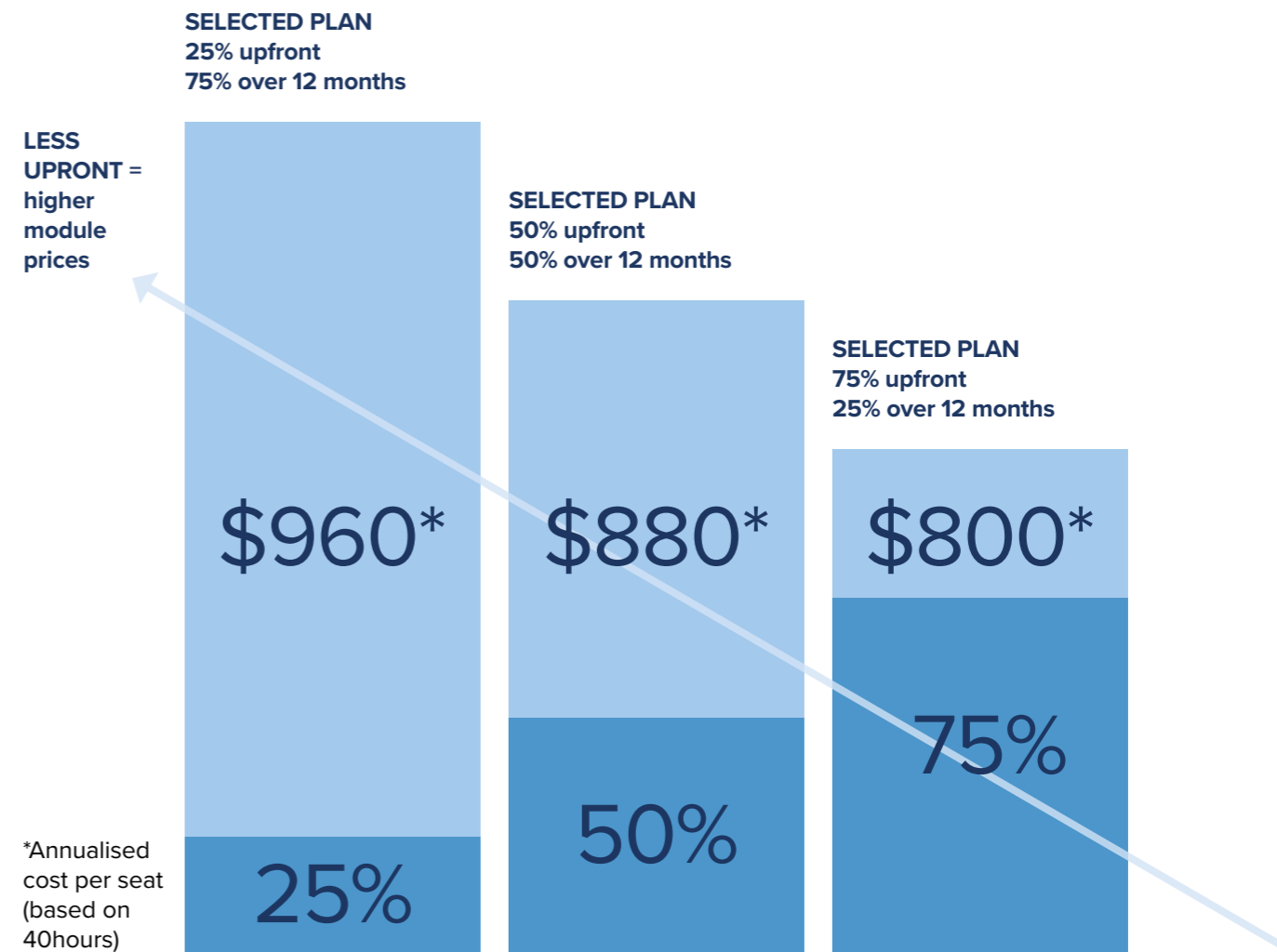
www.datacenterskillsbenchmark.com

GLOBAL FOOTPRINT

We run training in London, Paris, Milan, New York, Istanbul, Singapore, Hong Kong, Shanghai, Auckland, Melbourne, Sydney, Johannesburg, Amsterdam, Stockholm, Brazil, Madrid, Mexico and many more.

Flexible, Scalable Payment Plans

SELECTED PLAN
25% upfront
75% over 12 months

LESS UPRONT = higher module prices

SELECTED PLAN
50% upfront
50% over 12 months

SELECTED PLAN
75% upfront
25% over 12 months

$960*

$880*

$800*

75%

50%

*Annualised cost per seat (based on 40hours)

25%

THE TRAINING ACADEMY'S CLIENTS

Organisations using DCPro's training portfolio include many of the world's largest data center operators in banking and finance, cloud services, social media, facilities management, government and education.

White Labelling

You can customise the Learning and Development portal with your own branding, demonstrating to your clients (both internal and external) your commitment to operational excellence.
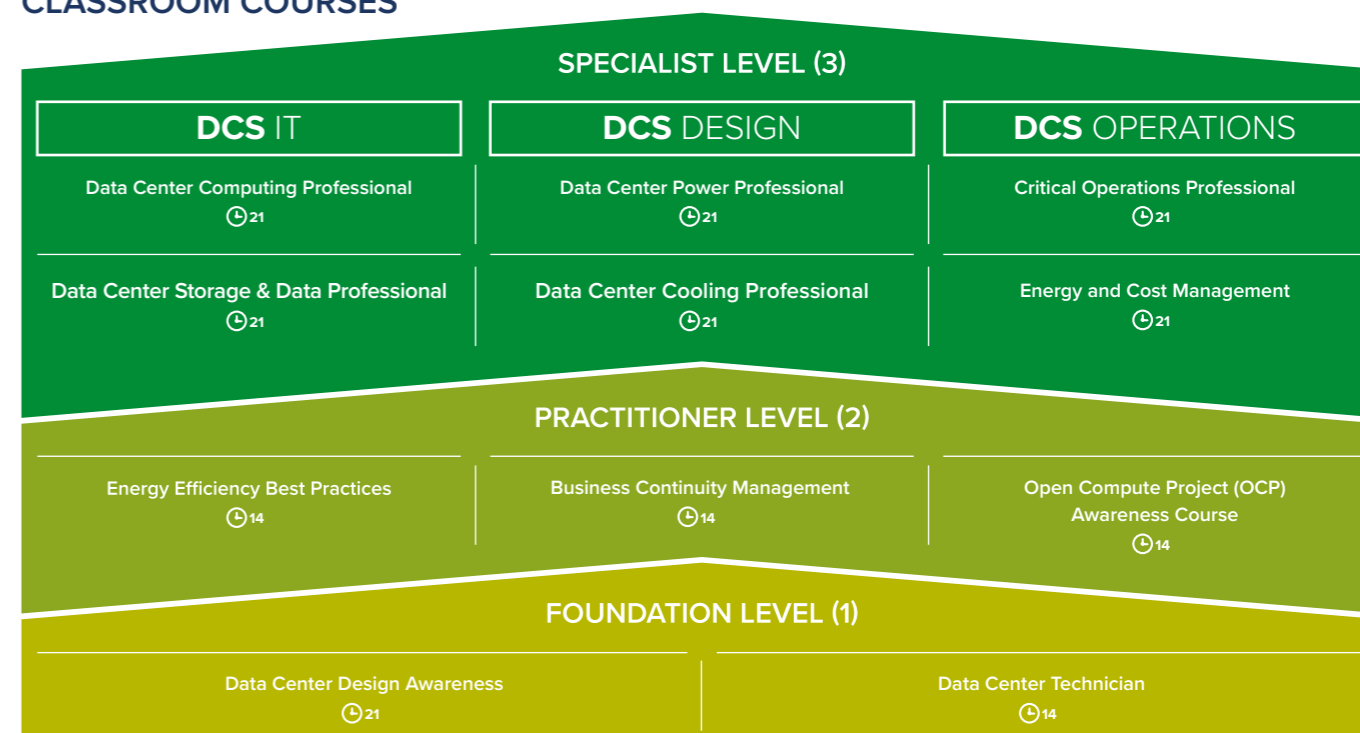
Your Logo Here

Your Brand Colors

Your Banner
Ad Here

Your Brand Colors

CFO asks CEO
What happens if we invest in developing our people and then they leave us?

CEO
What happens if we don't, and they stay?

Career Progression Framework

CLASSROOM COURSES

SPECIALIST LEVEL (3)

DCS IT	DCS DESIGN	DCS OPERATIONS
Data Center Computing Professional ⏱21	Data Center Power Professional ⏱21	Critical Operations Professional ⏱21
Data Center Storage & Data Professional ⏱21	Data Center Cooling Professional ⏱21	Energy and Cost Management ⏱21

PRACTITIONER LEVEL (2)

Energy Efficiency Best Practices ⏱14	Business Continuity Management ⏱14	Open Compute Project (OCP) Awareness Course ⏱14

FOUNDATION LEVEL (1)

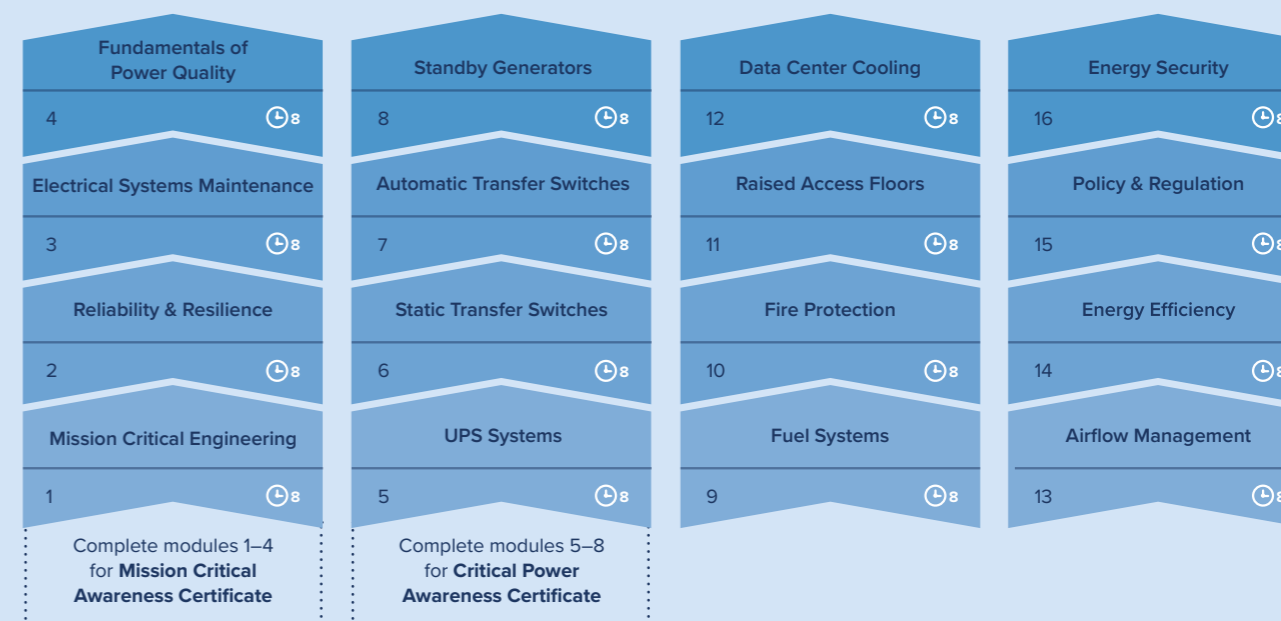| Data Center Design Awareness ⏱21	Data Center Technician ⏱14

ONLINE COURSES

CERTIFICATE IN FOUNDATIONS OF MISSION CRITICAL INFRASTRUCTURE

16 modules (or 128 PDHs)

After completing all the course modules and passing the online examinations, the student will receive a Certificate in "Foundations of Mission Critical Infrastructure".

Fundamentals of Power Quality	Standby Generators	Data Center Cooling	Energy Security
4 ⏱8	8 ⏱8	12 ⏱8	16 ⏱8
Electrical Systems Maintenance	Automatic Transfer Switches	Raised Access Floors	Policy & Regulation
3 ⏱8	7 ⏱8	11 ⏱8	15 ⏱8
Reliability & Resilience	Static Transfer Switches	Fire Protection	Energy Efficiency
2 ⏱8	6 ⏱8	10 ⏱8	14 ⏱8
Mission Critical Engineering	UPS Systems	Fuel Systems	Airflow Management
1 ⏱8	5 ⏱8	9 ⏱8	13 ⏱8
Complete modules 1–4 for **Mission Critical Awareness Certificate**	Complete modules 5–8 for **Critical Power Awareness Certificate**		

Specialist Credentials

🕐 77

IT	DESIGN	OPERATIONS
Data Center Computing Professional	Data Center Power Professional	Energy and Cost Management
Data Center Storage & Data Professional	Data Center Cooling Professional	Critical Operations Professional
Energy Efficiency Best Practices	Energy Efficiency Best Practices	Energy Efficiency Best Practices
Data Center Design Awareness	Data Center Design Awareness	Data Center Design Awareness
Data Center Efficiency	Standby Generators	Fundamentals of Power Quality
Policies and Regulations	Data Center Cooling	Mission Critical Electrical Systems Safety & Maintenance
Reliability and Resiliency	Raised Access Floors	Fire Protection in Mission Critical Infrastructures
Mission Critical Facilities Engineering	Uninterruptible Power Supply	Reliability and Resiliency
	Airflow Management	Mission Critical Facilities Engineering

CLASSROOM / ONLINE

Practitoner Credentials

🕐 40

ROUTE 1	ROUTE 2	ROUTE 3	ROUTE 4
Open Compute Project (OCP) Awareness Course	Energy Efficiency Best Practices	Energy Efficiency Best Practices	Business Continuity Management
Data Center Design Awareness	Data Center Design Awareness	Data Center Technician	Data Center Technician

CLASSROOM
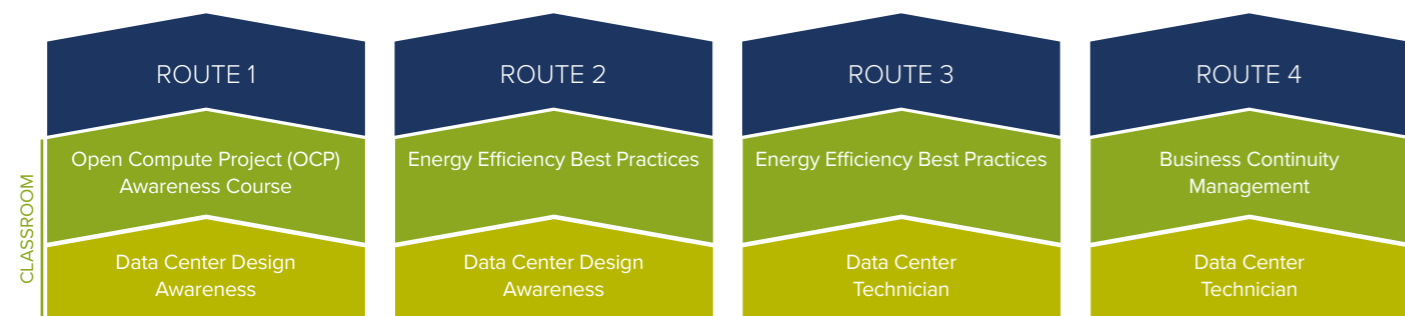
CHOOSE **ONE** ROUTE AND JUMPSTART YOUR CAREER.

GAINING THE DCS CREDENTIALS

To gain each DCS credential a student must complete the necessary hours of classroom and online courses from the framework (77 classroom and 40 online), then provide detailed project experience, and a full CV with references. This information is vetted by an external auditor.

RECOMMENDED MINIMUM PARTICIPATION REQUIREMENTS

For each of the courses on the framework we have suggested minimum educational/experience requirements which we feel are necessary to guarantee a satisfactory learning outcome from the course. Further details can be found online. If you do not meet some of the criteria, but feel that you have other relevant experience or a working background that you think is appropriate (with transferable skills/knowledge), please contact us to discuss further.

Our Global Experts

ASIA PACIFIC

Leonid Shishlov	🇷🇺
Grigory Youdin	🇷🇺
Alex Karpinskiy	🇷🇺
Ed Ansett	🇸🇬
Greg Sherry	🇸🇬
Derek William	🇸🇬
Ronnie Tsang	🇨🇳
Chris Molloy	🇦🇺

EUROPE, MIDDLE EAST & AFRICA

John Laban	🇬🇧
Phil Turnock	🇬🇧
Sophia Flucker	🇬🇧
Mike Foskett	🇬🇧
Robert Tozer	🇬🇧
Barry Shambrook	🇬🇧
Didier Monestes	🇫🇷
Ian Bitterlin	🇬🇧
Matthias Hannier	🇫🇷

UNITED STATES AND CANADA

Bob Landstrom	🇺🇸
Chris Bruderer	🇨🇭
David Boston	🇺🇸
Robert "Dr Bob" Sullivan	🇺🇸
Julius Neudorfer	🇺🇸
Michael Fluegeman P.E	🇺🇸

SPAIN & LATIN AMERICA

Hugo Bertini	🇦🇷
Fabiano Azevedo	🇧🇷
Marcelo Barbosa	🇧🇷
Agustin Lopez	🇪🇸
Garceran Rojas	🇪🇸
Nelson Farfan	🇨🇴

Become a Data Center Specialist (Design)

Data Center Specialists in Design are an elite group of experts who have demonstrated their commitment to the data center industry and to their professional development.

If you work in any aspect of data center design this internationally recognised training is for you:

- Data Center Operator
- Project Manager
- OEM Supplier
- IT Manager
- M&E Consultant
- HVAC Engineer
- Property Developer

WHY DCPROFESSIONAL DEVELOPMENT?

We have built an international network of data center and domain experts who we work with to develop and deliver groundbreaking training using the latest educational techniques.

Our classroom course instructors are the best in the business, each with a minimum of 10 years' project experience in the field. We are also the only provider to offer a range of online modules to complement your classroom training.

Our courses are endorsed by a range of international accrediting bodies, allowing you to earn Professional Development Hours throughout your training.

- Unlimited access to our exclusive online knowledge bank throughout your training

- 50% off additional online courses

- Publicise your skills and use the Data Center Specialist logo on your business stationary

How long does it take?

To complete the Data Center Specialist - Design Credential you will complete a total of 77 classroom hours and 40 hours of online modules.

In addition you'll need to provide detailed project experience and a full CV with references which will be vetted by an external auditor.

WHAT WILL YOU LEARN?

DATA CENTER DESIGN AWARENESS

From site selection to cabling infrastructure, this course focuses on the key skills required to understand the design concepts and interdependencies associated with each discipline.

ENERGY EFFICIENCY BEST PRACTICE

This Energy Efficiency course explores strategies for effective use of energy within the data center. It incorporates standards by the EU Code of Conduct, ASHRAE, The Green Grid and BCS– The Chartered Institute for IT.

DATA CENTER COOLING PROFESSIONAL

Covering the fundamentals of advanced cooling, impacts on cooling and design operations, as well as new operating, efficiency metrics and how it's applied in various data center scenarios.

DATA CENTER POWER PROFESSIONAL

Covering the importance of data center power consumption to business, government and society in general, whilst trying to meet sustainability targets in a low energy future.

You will also be able to choose 5 online modules from our Foundations of Mission Critical Infrastructure range.

> "One of the best courses I have taken since completing my degree in electrical engineering."
> CHRIS MULKERRINS, TalkTalk Technology

IEEE

ENGINEERING RCEP
REGISTERED CONTINUING EDUCATION PROGRAM

CIBSE

ENGINEERS AUSTRALIA

BICSI

NYIT
NEW YORK INSTITUTE OF TECHNOLOGY

professional engineers board
singapore

DATACENTER SPECIALIST IT | DATACENTER SPECIALIST DESIGN | DATACENTER SPECIALIST OPERATIONS | DATACENTER SPECIALIST NETWORK

Data Center Design Awareness

3 DAYS 🕐 **21**

BRAND NEW FOR 2016

Our **new** and **updated** course on Data Center Design Awareness will help you learn the key elements that influence the design of the modern data center. From site selection to cabling infrastructure, this course focuses on the key skills required to understand the design concepts and interdependencies associated with each discipline.

LEARNING OUTCOMES

Upon successful completion, students will be able to:

- Explain data center technology advances throughout history, today's challenges and today's industry bodies, standards, regulations, definitions and metrics
- Identify key stakeholders and design considerations in development of data center specifications
- Explain key considerations for data center site selection
- Apply best practice recommendations to building layout requirements, including resilience level and space requirements
- Discuss configuration options for

- the data center including cabinet types, sizes and layout
- Distinguish between copper and fibre cable and the appropriate containment of each
- Identify servers, storage equipment, communications equipment and technology developments used in the data center today
- Discuss today's challenges, standards and regulations
- Define best practice for cooling systems, including AC options and new technology developments
- Identify major components of electrical systems, including back-up systems, generators and application of efficiency standards

- Discuss configuration options for the data center, including cabinet types
- Recognize the essential elements of fire detection and fire suppression
- Discuss best security plans for physical and electronic security and surveillance. Identify policy and procedures, regulations and standards
- Define building automation protocols, integrated systems, measuring and monitoring, reporting systems and applicable industry standards
- Identify commissioning scope, project phases, commissioning plan and documentation, maintenance plans, codes and statutory regulations.

1 Courses aligned to international standards

2 Expert instructors with over 10 years experience

3 Interactive learning experience

4 Blended learning solutions (classroom and online)

5 Specialist career progression tracks for advanced learning

WHO SHOULD ATTEND?

Any individual directly or indirectly involved in the management or operation of an existing data center; or in the exploration, design or build phase of a new project, including:

- Data Center Operator
- OEM Supplier
- Sales Engineer
- Project Manager
- Facilities Manager

Professional Development Hrs	21
Exam	1 hour, open book
Pre-requisites	None
Suggested Progression	Energy Efficiency

Price - $1950 | €1500 | £1250

Energy Efficiency

2 DAYS 🕐 **14**

PRACTITIONER LEVEL COURSE

Our Energy Efficiency course explores strategies for the effective use of energy within the data center; incorporating standards imposed by the EU Code of Conduct, The Green Grid, ASHRAE, BCS - The Chartered Institute for IT, and IEEE. This course builds upon the knowledge gained in the foundation level course 'Data Center Design Awareness' and upon it's completion, students will be awarded a Data Center Practitioner credential and will qualify for our specialist level courses.

LEARNING OUTCOMES

Upon successful completion, students will be able to:

- Explain trends in global energy and data center power consumption
- Understand corporate drivers for energy efficiency and various stakeholder roles and responsibilities
- Distinguish between the various energy efficiency drivers for different data center types

- Identify typical "worst practices" in the data center
- Identify metrics and regulations that apply to and impact energy efficiency
- Understand how Tier levels and infrastructure resiliency can influence energy efficiency
- Understand the role played by commissioning to ensure energy efficiency best practices are implemented correctly

- Identify major savings related to energy efficiency in power and IT equipment
- Explain the impact of site selection on energy efficiency and vice versa

WHO SHOULD ATTEND?

Any individual directly or indirectly involved in the management or operation of an existing data center; or in the exploration, design or build phase of a new project, including:

- IT Manager
- M&E Consultant
- HVAC Engineer
- Property Developer
- Facility Manager
- Project Manager
- Data Center Owner/ Operator
- Building Contractor

Price - $1350 | €1050 | £850

Professional Development Hrs	14
Exam	1 hour, open book
Pre-requisites	None (although completion of our foundation level 'Data Center Design Awareness' course is recommended)
Suggested Progression	Data Center Cooling Professional + Data Center Power Professional OR Energy & Cost Management + Critical Operations Professional

Data Center Power Professional

3 DAYS ⏱21

SPECIALIST LEVEL COURSE

This course gives students an understanding of how power requirements impact the way data centers are designed and operated. From fundamentals of power distribution to critical power components and maintenance/safety, this course provides a granular understanding of the key challenges related to infrastructure investments and how to manage the complexities of change.

LEARNING OUTCOMES

Upon successful completion, students will be able to:

- Discuss the importance of data center power consumption to business, government and society in general, whilst trying to meet sustainability targets in a low energy future

- Identify the basics of voltage, current, power and power factor in 3-phase power circuits

- Recognise the power requirements of modern ICT loads, especially dual-cord designs and their purpose

- Recognise the competing models for power redundancy architecture, concurrent maintainability and fault tolerance

- Explain the concepts of Reliability, Availability and MTBF calculations for comparisons of system reliability

- Discuss UPS topologies according to IEC and the various forms of static UPS

- Explain emergency power generation, particularly diesel powered and including fuel delivery, storage and treatment

- Understand kinetic energy UPS, DRUPS of various types and hybrid rotary

- Explain battery energy storage with emphasis on lead-acid cells, covering design, selection and sizing of UPS batteries

- Discuss alternative energy storage to batteries including kinetic energy and compressed air

- Define automatic transfer switches and static transfer switches with their application in critical power distribution systems

- Discuss short-circuits, fault-current sources and examples of source impedances and circuit protection in critical ICT systems

- Differentiate between AC power and HVDC power in the data center

- Recognize the concepts of power quality, especially harmonics in electronic loads

- Identify the particular maintenance issues of data centers and how the power system design can influence availability

- Discuss industry standards, codes and guides

WHO SHOULD ATTEND?

Any person involved in the management of a data center/computer room or involved in the exploration, design or build phase for a new project, including:

- IT Manager
- M&E Consultant
- HVAC Engineer
- Property Developer
- Facility Manager

Professional Development Hrs	21
Exam	1 hour, open book
Pre-requisites	Practical hands-on experience of a data center environment is recommended
Suggested Progression	Data Center Cooling Professional + online modules

Price - $2250 | €1725 | £1425

Data Center Cooling Professional

3 DAYS ⏱21

SPECIALIST LEVEL COURSE

This course explains the thermodynamics of cooling in an easy to understand way and focuses on the application of concepts that students can use in their own data center today. While this course does not replace the need for a knowledgeable HVAC Engineer, it does provide the learning necessary to allow students to successfully operate the cooling system within a data center.

LEARNING OUTCOMES

- Upon successful completion, students will be able to:

- Get an introduction to advanced cooling, impacts on cooling and design operations and new operating parameters and efficiency metrics

- Explain the implications of equipment placement, installation and decommissioning on cooling and energy efficiency

- Explain airflow management systems

- Discuss free cooling and how it may be applied in various data center scenarios

- Understand the factors related to optimisation in a new data center vs a legacy data center

- Explain how to deal with new and disruptive technologies such

as unified computing platforms, blade servers and high-density networking devices

- Apply Computational Fluid Dynamics (CFD) modelling to help validate a data center's design and the placement of equipment within it

WHO SHOULD ATTEND?

Any person involved in the management of a data center/computer room or involved in the exploration, design or build phase for a new project, including:

- M&E Engineer/Consultant
- HVAC Engineer/Consultant
- Data Center Manager
- IT Manager
- Network Manager
- Facility Manager
- Project Manager
- Building Contractor
- OEM Sales Engineer
- Architect

Professional Development Hrs	21
Exam	1 hour, open book
Pre-requisites	Practical hands-on experience of a data center environment is recommended
Suggested Progression	Data Center Power Professional + online modules

Price - $2250 | €1725 | £1425

Become a Data Center Specialist (Operations)

Data Center Specialists in Operations are an elite group of experts who have demonstrated their commitment to the data center industry and to their professional development.

If you work in any aspect of data center operations this internationally recognised training is for you:

- Data Center Operator
- Project Manager
- Data Center Manager
- Business Unit/Client Manager
- M&E Operational Management
- IT Architect

WHY DCPROFESSIONAL DEVELOPMENT?

We have built an international network of data center and domain experts who we work with to develop and deliver groundbreaking training using the latest educational techniques.

Our classroom course instructors are the best in the business, each with a minimum of 10 years' project experience in the field. We are also the only provider to offer a range of online modules to complement your classroom training.

Our courses are endorsed by a range of international accrediting bodies, allowing you to earn Professional Development Hours throughout your training.

- Unlimited access to our exclusive online knowledge bank throughout your training

- 50% off additional online courses

- Publicise your skills and use the Data Center Specialist logo on your business stationary

How long does it take?

To complete the Data Center Specialist - Design Credential you will complete a total of 77 classroom hours and 40 hours of online modules.

In addition you'll need to provide detailed project experience and a full CV with references which will be vetted by an external auditor.

WHAT WILL YOU LEARN?

DATA CENTER DESIGN AWARENESS	ENERGY EFFICIENCY	CRITICAL OPERATIONS PROFESSIONAL	ENERGY AND COST MANAGEMENT
From site selection to cabling infrastructure, this course focuses on the key skills required to understand the design concepts and interdependencies associated with each discipline.	This Energy Efficiency course explores strategies for effective use of energy within the data center. It incorporates standards by the EU Code of Conduct, ASHRAE, The Green Grid and BCS– The Chartered Institute for IT.	Covering everything from the re-evaluation of business criticality and Tier levels to critical operations procedures, this advanced level course encourages students to discuss their real-world experiences within the classroom.	This course deals with the effective use of energy by software, ICT systems and support infrastructure within the data center. It covers best practices and strategies to control and manage energy efficiency.

You will also be able to choose 5 online modules from our Foundations of Mission Critical Infrastructure range.

> **"I would have no hesitation in recommending the course to anyone who is involved in the design of data centers and mission critical facilities."**
>
> JOHN HILL, HurleyPalmerFlatt

Critical Operations Professional

3 DAYS · 21

SPECIALIST LEVEL COURSE

Covering everything from the re-evaluation of business criticality and Tier levels to critical operations procedures, this advanced level course encourages students to discuss their real-world experiences within the classroom.

LEARNING OUTCOMES

Upon successful completion, students will be able to:

- Undertake a business needs assessment for a data center. Identify availability requirements and appropriate Tier classification and understand some techniques of demand forecasting

- Discuss data center finance terms, budgets and financial analysis and reporting requirements

- Recognise the human factors relating to downtime incidents and the impact of downtime on their business

- Correctly manage risk, identifying the benefits, methodologies and

techniques of comprehensive risk management

- Identify the impact of electrical and mechanical operations on the critical operations of a data center and safe working practices

- Differentiate between data center cooling systems, efficient operating parameters, new efficiency metrics, and their operational impacts

- Identify the operational impacts of moves, adds, changes and the logistical support of these activities

- Understand the operational impact of a rapidly increasing

amount of building and systems data reporting and the dangers of incorrect alarm prioritisation and processing

- Identify the minimum operations requirements of ancillary services such as fire and security systems and the building fabric maintenance, cleaning and estate management and third party maintenance contracts

- Recognise the basic data center statutory inspections, registers and maintenance records and documentation required.

WHO SHOULD ATTEND?

Any person involved in the management of mission critical IT and telecoms infrastructure, or those involved in design consultancy, including:

- M&E Operational Management
- Data Center Manager
- Business Unit/Client Manager
- Construction Project Manager

Price - $2850 | €2150 | £1750

Professional Development Hrs	21
Exam	1 hour, open book
Pre-requisites	Recommended 1-2 yrs verifiable experience in a data center/computer room environment
Suggested progression	Energy & Cost Management + online courses

OPERATIONS

Energy and Cost Management

3 DAYS · 21

SPECIALIST LEVEL COURSE

This course explores the effective use of energy by software, ICT systems and support infrastructure, within the data center. It covers best practices and strategies to control and manage energy efficiency.

LEARNING OUTCOMES

Upon successful completion, students will be able to:

- Discuss electricity consumption and rates from a data center perspective, sustainability and monitoring industry organisations

- Discuss building and data center codes, carbon taxes and the climate change agreement

- Identify the corporate drivers for energy management, corporate and social responsibility, brand management, etc.

- Define and explain the basic

metrics for data center efficiency, including DCIE and PUE

- Explain data center maturity

- Identify key roles and responsibilities in the energy efficiency initiative within a data center

- Define efficiency imperatives in the design of a data center

- Explain the role of IT equipment within the data center

- Discuss IT power management

and device environmentals according to ASHRAE

- Apply basic energy efficiency management techniques to the areas of IT, cooling and electrical systems

- Analyse the capabilities and limitations of metrics

- Report data center costs

WHO SHOULD ATTEND?

Any person involved in the management of mission critical IT and telecoms infrastructure, or those involved in design consultancy, including:

- Data Center Operator
- Data Center Design Consultant
- IT Architect
- IT Purchaser
- Environmental Champions within IT Department

Price - $2850 | €2150 | £1750

Professional Development Hrs	21
Exam	1 hour, open book
Pre-requisites	Recommended 1-2 yrs verifiable experience in a data center/computer room environment
Suggested progression	Critical Operations Professional

DESIGN

Become a Data Center Specialist (IT)

Data Center Specialists in IT are an elite group of experts who have demonstrated their commitment to the data center industry and to their professional development.

If you work in any aspect of data center IT this internationally recognised training is for you

- Data Center Operator
- Project Manager
- Storage Architect
- Business Continuity Planner
- Data Management Specialist
- IT Consultant
- Network Manager
- Enterprise Application Developer

WHY DCPROFESSIONAL DEVELOPMENT?

We have built an international network of data center and domain experts who we work with to develop and deliver groundbreaking training using the latest educational techniques.

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- Unlimited access to our exclusive online knowledge bank throughout your training

- 50% off additional online courses

- Publicise your skills and use the Data Center Specialist logo on your business stationary

How long does it take?

To complete the Data Center Specialist - IT Credential you will complete a total of 77 classroom hours and 40 hours of online modules.

In addition you'll need to provide detailed project experience and a full CV with references which will be vetted by an external auditor.

WHAT WILL YOU LEARN?

DATA CENTER DESIGN AWARENESS

From site selection to cabling infrastructure, this course focuses on the key skills required to understand the design concepts and interdependencies associated with each discipline.

ENERGY EFFICIENCY

This Energy Efficiency course explores strategies for effective use of energy within the data center. It incorporates standards by the EU Code of Conduct, ASHRAE, The Green Grid and BCS– The Chartered Institute for IT.

DATA CENTER STORAGE & DATA PROFESSIONAL

Covering the fundamentals of developing a company-wide "data quality" program. This course covers the organisation, administration and governance of large volumes of data, using business intelligence tools and analysis of big data.

DATA CENTER COMPUTING PROFESSIONAL

This course explores the impact of computing on the data center, as well as the knowledge of how to implement proper architectures and equipment to complement the rest of the data center.

You will also be able to choose 5 online modules from our Foundations of Mission Critical Infrastructure range.

> **"The courses are expertly delivered with the most up to date information by the experienced DCProfessional Development team."**
> JAMES INDER, Jersey Telecom

IEEE | ENGINEERING RCEP REGISTERED CONTINUING EDUCATION PROGRAM | CIBSE | ENGINEERS AUSTRALIA | Bicsi | NYIT NEW YORK INSTITUTE OF TECHNOLOGY | professional engineers board singapore

DATACENTER SPECIALISTS IT | DATACENTER SPECIALISTS DESIGN | DATACENTER SPECIALISTS OPERATIONS | DATACENTER SPECIALISTS NETWORK

Data Center Computing Professional

3 DAYS ⏱21

SPECIALIST LEVEL COURSE

Develop the skills necessary to operate within a live, mission critical environment. This specialist level course will provide a detailed understanding of the impact of computing on the data center, as well as the knowledge of how to implement proper architectures and equipment to complement the rest of the data center.

LEARNING OUTCOMES

Upon successful completion, students will be able to:

- Identify key stakeholders that should be part of any IT project or network and the key factors that should be considered

- Demonstrate an understanding of the impact of virtualisation, grid computing, cloud computing, high performance computers and data centers – for software-defined installation in the data center

- Identify the pros and cons of different computing strategies related to the storage hierarchy, the network structure, energy use, latency, bandwidth and capacity

- Demonstrate an awareness of the latest trends in critical areas such as resource management, security, energy consumption and complex systems

- Distribute computing resources as efficiently as possible whilst also meeting the needs of the business by putting correct service level agreements in place

- Use a wide variety of hardware capacity processing without affecting the performance of applications.

WHO SHOULD ATTEND?

Any person involved in the management of mission critical IT infrastructure, including:

- Data Manager
- Database Analyst
- Information Analyst
- Data Administrator
- Corporate Data Architect
- Data Warehouse Engineer
- System Manager

Professional Development Hrs	21
Exam	1 hour, open book
Pre-requisites	Recommended 1-2 yrs verifiable experience in a data center/computer room environment
Suggested Progression	Data Center Storage and Data Professional + online courses

Price - $2250 | €1725 | £1425

IT DESIGN OPERATIONS NETWORK

Data Center Storage and Data Professional

3 DAYS ⏱21

SPECIALIST LEVEL COURSE

Learn the fundamentals of developing a company-wide "data quality" program. This specialist level course covers the organisation, administration and governance of large volumes of data, using business intelligence tools and analysis of big data.

LEARNING OUTCOMES

Upon successful completion, students will be able to:

- Identify the strategic needs of company data

- Develop and maintain an enterprise data strategy and coordinate governance activity

- Develop an enterprise data model that aligns with their company's commercial activity

- Improve existing data management activities, including the design of physical databases, data access services, data migration and conversion, and testing and validation of data

- Understand the need for the privacy, confidentiality and security of data – taking into account business continuity strategies for disaster recovery and data protection

- Understand the fundamentals of the management applications control panels, evaluation (scorecards) and analysis.

WHO SHOULD ATTEND?

Any person involved in the management of mission critical IT infrastructure, including:

- Data Manager
- Database Analyst
- Information Analyst
- Data Administrator
- Corporate Data Architect
- Data Warehouse Engineer
- System Manager

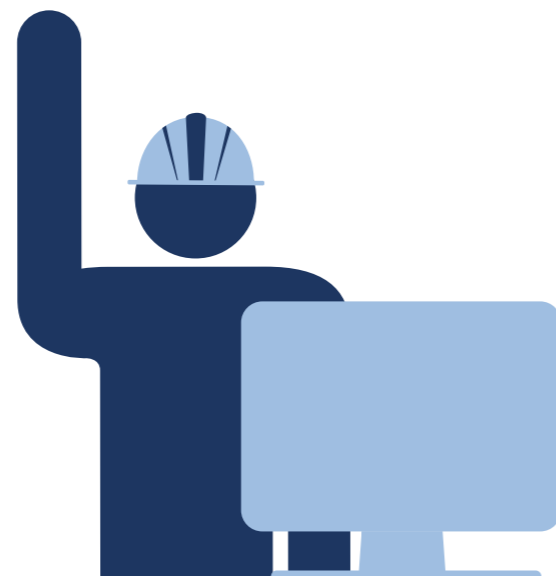| Professional Development Hrs	21
Exam	1 hour, open book
Pre-requisites	Recommended 1-2 yrs verifiable experience in a data center/computer room environment
Suggested Progression	Data Center Storage and Data Professional + online courses

Price - $2250 | €1725 | £1425

IT DESIGN OPERATIONS NETWORK

Data Center Health and Safety

🕐 1-HOUR ONLINE INDUCTION PROGRAM

DCProfessional Development has developed an induction program for your entire data center staff. Covering topics including mission critical awareness and health and safety this online course is designed for anyone working in and around the data center.

Who should attend?

Anyone working in and around the data center, including but not limited to:
- Data Center Engineers
- Electrical Engineers
- Secretaries
- Facility Management
- Cleaning Staff
- Architects

Professional Development Hours	1
Exam	Knowledge checks throughout + short end of course test
Pre-requisites	None
Suggested progression	Data Center Design Awareness

Price: $100 | £60 | €75

LEARNING OUTCOMES

- Explain the role of a data center and how it relates to the corporate enterprise mission critical culture

- Describe the concept of critical awareness and its importance to the mission critical industry, the client's needs and the corporate bottom line

- Identify how to assess and communicate risk and take preventative action

- Recognise conditions that are hazardous to a mission critical data center

- Identify the different types of mission critical equipment and its importance to the data center

- Outline the key standard operating procedures, alarm response and emergency action procedures and their role in reducing human error

5 REASONS TO CHOOSE DCPROFESSIONAL DEVELOPMENT INDUCTION TRAINING:

1 Courses aligned to international standards

2 Training developed by renowned industry experts

3 Customise with your own branding

4 Benefit from our Flexible Pricing Model

5 Interactive Learning Experience

COURSE CONTENT

Data Center Fundamentals	• Whitespace overview and equipment breakdown • Importance of data centers • Mission of data centers • People, process, equipment	• How human error affects downtime and overall performance • Spotting hazards in the workplace • Hazard awareness tips
Infrastructure Systems Overview: Information Technology Equipment (ITE) Room	• Safety in the workplace • Static electricity • Lighting • Airflow management	• UPS Systems • Cabling • The Operating Envelope
Electrical and Mechanical Systems Overview	• CRAC/CRAH units • Chillers • Cooling tower	• Water storage • Electrical and fuel systems • Importance of testing equipment

Foundations of Mission Critical Infrastructure

Based on the highly acclaimed book "Maintaining Mission Critical Facilities Engineering in a 7/24 Environment," this 16-part online course takes engineers from the basic concepts underpinning mission critical practice, through to specific focus areas that complete the discipline.

Hosted on our new state-of-the-art learning management system, Foundations of Mission Critical Infrastructure is one of our most flexible training solutions, where you can:

- Complete individual modules to complement classroom training
- Complete the full suite to achieve the internationally recognised Certificate in Foundations of Mission Critical Infrastructure
- Complete just 4 or 8 modules and earn a Mission Critical Awareness and/or Critical Power Certificate along the way.

WHY DCPROFESSIONAL DEVELOPMENT?

- We are the only provider of online mission critical training solutions to the global data center industry

- Our course content is developed in conjunction with leading experts in the mission critical space

- Our courses are endorsed by a range of international accrediting bodies, allowing you to earn Professional Development Hours (PDHs) throughout your training

- Enjoy unlimited access to our exclusive online knowledge bank and discussion forums, throughout your training

- Get 50% off additional online courses, with discounts on classroom training also available

- Publicise your skills and feature the Certificate in Foundations of Mission Critical Infrastructure logo on your business stationery.

How long does it take?

Each individual online course can be completed in 8 hours. Complete all 16 courses in the Foundations of Mission Critical Infrastructure training program and you'll earn 64PDHs.

WHO SHOULD ATTEND?

- Students of Engineering and Information Technology
- Data Center Facilities and Operations Personnel
- Equipment Vendors and Contractors
- Professional Engineers

> **"I enjoyed the video presentations that were sprinkled throughout the module, as well as the narrator when she spoke."**
> FMCI student

WHAT WILL YOU LEARN?

Fundamentals of Power Quality	Standby Generators	Data Center Cooling	Energy Security
4 8	8 8	12 8	16 8
Electrical Systems Maintenance	Automatic Transfer Switches	Raised Access Floors	Policy & Regulation
3 8	7 8	11 8	15 8
Reliability & Resilience	Static Transfer Switches	Fire Protection	Energy Efficiency
2 8	6 8	10 8	14 8
Mission Critical Engineering	UPS Systems	Fuel Systems	Airflow Management
1 8	5 8	9 8	13 8

Complete modules 1–4 for **Mission Critical Awareness Certificate**

Complete modules 5–8 for **Critical Power Awareness Certificate**

ASHRAE

DCProfessional Development has produced a comprehensive foundation course covering the entire thermal envelope, helping to bring ASHRAE's principles to a wider audience.

Learn the principles of ASHRAE's TC9.9 datacom series through our interactive online training program.

How long does it take?

The complete ASHRAE suite consists of 5 online modules, each taking around 8 hours. You can complete the modules individually, or the whole range and earn 40PDHs.

LEARNING OUTCOMES

- Summarise the purpose and history of ASHRAE and ASHRAE TC9.9
- Describe datacom and ITE environment characteristics
- Name the new ITE and datacom environment envelopes
- Identify how heat density and future power trends affect the datacom environment
- List the key aspects of datacom facility planning and design
- Recognise all thermal envelope management and design factors
- Recognise how each type of datacom IT equipment affects facility load
- Estimate the overall heat load when given the necessary variables
- Recognise the importance of each of the 5 design considerations for data center cooling systems
- Identify the types of chillers and condensors
- Recognise basic design and operation elements for each piece of facility equipment
- Recognise the important piping design considerations for facility and data center integration
- Recognise the elements needed for a sound water treatment plan
- Differentiate between the functionality and delivery of the most common cooling methods
- Recognise the benefits and concerns of vertical under floor and overhead delivery methods

- Recognise the importance of the chiller plant in air cooling systems
- Identify key elements to consider when selecting air cooling system for the datacom environment
- List the key properties and usage considerations of 3 coolant types; water, fluorocarbons and refrigerants
- Identify when and why liquid cooling is a superior option to air cooling
- Indicate the basic cost considerations and test objectives for each of the 5 commissioning levels
- Differentiate between the liquid cooling configurations at both the rack and equipment levels
- Recognise the advantages of a liquid cooled system configured with a CDU
- Indicate the operational requirements for facilities providing coolant to datacom equipment
- Recognise the impact of proper piping design specific to each CDU configuration
- Identify the causes and effects that arise from water quality issues within facility piping
- Recognise the key metrics required to accurately design and manage a data center white space
- Identify how specific technologies are utilised given varying design scenarios
- Recognise the key design differences when planning a data center utlilising: CRAC cooling, in-row cooling, water cooling and economiser cooling

- Define the 3 types of economisers
- Identify the applicable regions of the ASHRAE Psychometric chart for air-side economisers
- Differentiate between the state of real-time energy consumption measurements in the data center for both legacy and state of the art
- List the key elements of the minimum and best practice levels of measurement as well as real-time measurement for state of the art measurement for real-time energy consumption
- Recognise how the real-time data is used, in particular how this information will be turned into knowledge that can lead to actionable items
- Indicate how the energy efficiency metrics from organisations such as The Green Grid and ASHRAE TC9.9 are utilised
- Indicate how to quantify the data center's power consumption for a data center housed in a mixed-use facility
- Recognize the two driving factors towards energy efficiency
- Identify the purpose of PUE and DCIE
- Indicate how a facility's PUE value is obtained and utilized
- Recognize key monitoring metrics for the following systems: Data Center Cooling, ITE and Power Distribution

WHY CHOOSE THIS TRAINING?

- Learn the principles of ASHRAE's TC9.9 datacom series in a digestible way
- Stay ahead of the curve in this demanding industry, with the only provider of ASHRAE-based online training
- Decrease your bottom line spending or total cost of ownership by completing the entire suite of courses

WHAT WILL YOU LEARN?

THERMAL GUIDELINES
This course covers the Datacom ITE power trends and thermal guidelines for data processing environments. It provides ways of applying trend information to datacom facility designs today.

COOLING FUNDAMENTALS PART 1
This course covers design, function and integration of air and liquid datacom cooling systems and discusses how commissioning is paramount to a proper functioning facility.

COOLING FUNDAMENTALS PART 2
This course covers a range of design solutions for datacom liquid cooling systems; including utilising waterside and airside economisers, CDU usage and rack level liquid cooling.

DATACOM LOAD ENERGY METRICS
This course focuses on monitoring and control of optimisation of data center energy efficiency, as well as predicting the health of the infrastructure by tracking performance trends.

DATA CENTER ENERGY EFFICIENCY
This course provides detailed information on the design of datacom facilities that will aid in minimising the life-cycle cost and maximise energy efficiency in a facility to align with ASHRAE's direction to "lead the advancement of sustainable building design and operations"

GET IN TOUCH

E: info@dc-professional.com
W: www.dc-professional.com