

Masters Degree in Data Center Leadership and Management

3 Years Distance Learning

The Global Leader in Technical Education
for the Digital Infrastructure Industry

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Learner Profile

This Masters Degree is suited to leaders and senior managers working in data center facilities wishing to form the elite group of worldwide data center professionals.

Pre-Requisites

This program has been designed for people in leadership and management positions within data center facilities.

CNet will consider all applications individually, taking into account each applicant's experience and qualifications.

We encourage you to apply if you:

- ▶ Work in a data center facility
- ▶ Experience: Have at least two years at middle or senior management level in a data center context

It would be advantageous if you have a first or second class degree from a UK university, or equivalent from an overseas university.

Those applicants for whom English is not a first language will be expected to demonstrate a certificated level of proficiency of at least IELTS 6.5 or equivalent.

Program Objectives

The aim of this Degree is to unite the existing knowledge and skills of data center professionals with essential new learning centered around leadership and management within a data center environment and award a top level degree qualification.

Qualification

- ▶ Masters Degree in Data Center Leadership & Management - a Level 7 qualification
- ▶ Graduates will be invited to a Degree graduation ceremony in Cambridge, UK, and can utilize a post nominal title, using the initials MA after their name

Price

£6,000 per year (total £18,000)

The fee is VAT exempt.

Scholarships are available through iMasons Scholarships - www.imasons.org

Masters Degree in Data Center Leadership and Management

Overview

Data centers are complex facilities that are expected to deliver faultless service and financial results in a world of rapidly changing technologies, business pressures and environmental expectations.

In order to achieve this, data centers need highly capable leaders and managers - individuals who are capable of dealing with business complexity and technological change with the knowledge and skills to ensure their teams deliver against consistently challenging objectives.

The Masters Degree in Data Center Leadership and Management is a unique program, which has been designed in collaboration with the industry to advance data center professionals worldwide. No other university program offers data center professionals this high level leadership and management education tailored to the data center sector.

The program harnesses CNet's unique insight into data center operations and expertise in business leadership and management. Topics have been selected on the basis of feedback from the industry and data center professionals who are themselves involved with delivering the program alongside other hand-picked specialists. The program is based around the learners' professional work in order to ensure that the learning is relevant and can be applied to the workplace.

Delivery of the program is through distance learning, meaning that learners can study at times that are convenient to them. They can also easily communicate with their tutors and each other wherever they are in the world.

Structure

Primarily this three year program is based around supported online distance learning via a learning management system, providing flexibility and complete interaction every step of the way. Learners will be supported by the CNet team, specialist academic staff and industry specialists, all with the aim of creating an enriched shared learning experience. Each year there is an optional Bootcamp in Cambridge, UK for those that can attend.

On average, learners commit the equivalent of approximately 10 hours of study to the program per week during trimester time, however this study can be taken at your own pace and undertaken at a convenient time for you. However, the deadlines that are given for your assessed work are strict and must be met.

The program is run across two learning periods per year. There are two points of entry each year, one in January/February, the other in September. Each module is formally assessed.

Program Requirements

As a distance learner, you will also need a suitable computer with internet connection, together with sufficient IT competence to make effective use of word processing, internet and email.

Masters Degree in Data Center Leadership and Management Content

Year 1 - PG Certification (PGCert)

The first year of the program enables you to develop your expertise in three key themes that are at the heart of any business: leadership, sustainability and financial management. The program starts with an introduction to leadership in the data center sector, exploring different approaches to leading in a complex and dynamic business. You will then go on to look at issues of sustainability and design, from the business management perspective. Leaders also need a sound understanding of money issues, so financial management is also included coupled with how financial considerations influence you as a leader.

Data Center Leadership

- ▶ Evolution of leadership
- ▶ Complexity theory, dynamic organizational environments, strategic alignment in organizations, systems theory
- ▶ Emergent leadership theory in dynamic environments
- ▶ Internal business environment analysis and organizational dynamics
- ▶ Models of strategic analysis
- ▶ The role of leaders in fostering cultures of innovation, creativity and change capability in dynamic environments
- ▶ Change management

Sustainable Design for High Capacity Data Centers

- ▶ Modular Data Center Design for reliability, scalability, efficiency and sustainability
- ▶ Management of “utility” operations like electricity, heating and cooling from a usage, efficiency and cost saving perspective
- ▶ Environmental monitoring technologies
- ▶ Maximizing system utilization for best efficiency
- ▶ Continuous commissioning
- ▶ Use of cloud technology to minimize the impact of data centers on the environment

Finance for Decision Making

- ▶ Overview of the financial system
- ▶ Decision making and problem solving in theory and practice
- ▶ Financial objectives and strategies linked to general strategies and environmental circumstances
- ▶ Corporate governance issues
- ▶ Financial risk - types and copying mechanisms
- ▶ Relationship between financial risk and expected return
- ▶ Treasury management and control of working capital
- ▶ Investment appraisal

Year 2 - PG Diploma (PGDip)

The second year takes your expertise to the next level. You will start off by exploring key data center issues of infrastructure management, security and disaster recovery, in particular looking from the perspective of the business. To be successful, a data center business is dependent upon its people, so you will explore human resource management, organizational behaviour and strategies for maximizing performance in teams. You will also develop your understanding of decision making, which is particularly important in critical services.

Data Center Infrastructure Management, Security and Disaster Recovery

- ▶ Asset tracking (“Cradle to Grave”)
- ▶ Change management
- ▶ Analysis of virtual/logical systems and how they interact with physical hardware
- ▶ Management & resilience high capacity storage in complex data centers (especially related to disaster recovery scenarios)
- ▶ Consolidation of resources/locations
- ▶ Optimizing physical infrastructure (including space management) to enable higher capacity
- ▶ Multi-layered monitoring
- ▶ Future strategic planning via modeling scenarios
- ▶ Physical security & data security
- ▶ Virtual digital security (especially in co-location environments)
- ▶ Identification of data center infrastructure risks and vulnerabilities, mitigation techniques and recovery policies
- ▶ Governance relating to data protection, safe harbour and other compliance regimes
- ▶ Evaluation metrics

HRM and Organizational Capability Development

- ▶ Managing human resources for optimal performance
- ▶ Organizational behaviour
- ▶ Developing and managing structures for continued capability growth
- ▶ Managing contractor arrangements and a contingent workforce
- ▶ Knowledge management

Decision Making in Critical Services

- ▶ Risk identification and mitigation
- ▶ Sense-making and management behaviour during critical incidents
- ▶ Response to critical incidents and first response management
- ▶ Managing consequence
- ▶ Managing human responses during times of crisis
- ▶ Managing and evaluating service level agreements (or similar)
- ▶ Critical infrastructure asset management

Year 3 - MA

The final year expands your horizons even further, giving you the chance to develop your thought leadership and address specific business issues. First, in the “Contemporary Issues in Leadership and Management” module, you will explore themes in the data center sector and gain an in depth understanding of issues that are important to you. Next, you will develop your research skills, giving you the expertise to frame, plan and deliver research - this will provide a platform for your academic studies and will also enable you to develop new, credible and robust knowledge in your business. Finally, you will put all of your learning into practice by developing and delivering a major project (“dissertation” or “thesis”). You can look at this as a piece of work which could address a live issue in your workplace, or be based on a theme in the data center sector as a whole. Your major project will be one of the defining moments of your Masters Degree program and could open the door to further study or career development.

Contemporary Issues in Leadership and Management

- ▶ Leadership and CSR
- ▶ Technology advancements and implications
- ▶ Sustainability and environmental issues
- ▶ Globalization and offshoring
- ▶ Standards and quality management
- ▶ Other topics as identified by industry partners

Research Methods & Post Graduate Major Project

- ▶ Intellectual and practical skills to frame, plan and deliver research
- ▶ Analysis and interpretation of data generated
- ▶ Bringing this into action through a major research project, based on your own interests and providing a culmination of your work on the Masters program