

### Learner Profile

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

### Pre-requisites

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

### 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.

We 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 centre facility
- ▶ Have at least two years experience at middle or senior management
- ▶ Level in a data centre 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.

### Qualification

- ▶ Masters Degree in Data Centre Leadership & Management (MA) – a Level 7 qualification
- ▶ Use of the MA post nominal title, e.g. Louise Clark MA
- ▶ Use of the official Masters Degree in Data Centre Leadership and Management (MA) digital badge
- ▶ Graduates will be invited to a graduation ceremony in Cambridge, UK

### Learner Support

Masters Degree learners have access to a team of qualified professionals to support their learning, overseen by CNet's Further and Higher Education principal, Jill Baldwin. Jill is the link between the CNet team and Anglia Ruskin University, and she prepares and presents all learners' work for quality assurance scrutiny by the university. In addition, each module of study has a dedicated tutor who is in weekly contact with all learners, guiding them through the learning material and offering support through regular online tutorials and one-to-one help as needed. In addition, Helen Marriott, our Degree Coordinator, is available for all aspects of learner advice related to any aspect of the degree from navigating the CNet Academy learning management system, to extenuating circumstances for learner assessment.

## Masters Degree in Data Centre Leadership and Management

Data centres 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 centres 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.

### Program Overview

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

The program harnesses CNet's unique insight into data centre operations and expertise in business leadership and management. Topics have been selected on the basis of feedback from the industry and data centre 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.

# Masters Degree in Data Centre Leadership and Management (MA) Topics

## 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 centre 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 Centre Leadership

- ▶ Evolution of leadership
- ▶ Complexity theory, dynamic organisational environments, strategic alignment in organisations, systems theory
- ▶ Emergent leadership theory in dynamic environments
- ▶ Internal business environment analysis and organisational 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 Centres

- ▶ Modular data centre 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
- ▶ Maximising system utilisation for best efficiency
- ▶ Continuous commissioning
- ▶ Use of cloud technology to minimise the impact of data centres on the environment

### Finance for Non-financial Managers

- ▶ Understanding and evaluating financial statements
- ▶ Effective budgeting and control
- ▶ Choosing the most profitable investments
- ▶ Financial input for strategic and tactical decision making
- ▶ Financial skills required for senior management

## Year 2

PG Diploma (PGDip)

The second year takes your expertise to the next level. You will start off by exploring key data centre issues of infrastructure management, security and disaster recovery, in particular looking from the perspective of the business.

To be successful, a data centre business is dependent upon its people, so you will explore human resource management, organisational behaviour and strategies for maximising performance in teams. You will also develop your understanding of decision making, which is particularly important in critical services.

### Data Centre 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 and resilience of high capacity storage in complex data centres (especially related to disaster recovery scenarios)
- ▶ Consolidation of resources/locations
- ▶ Optimising physical infrastructure (including space management) to enable higher capacity
- ▶ Multi-layered monitoring
- ▶ Future strategic planning via modelling scenarios
- ▶ Physical security and data security
- ▶ Virtual digital security (especially in colocation environments)
- ▶ Identification of data centre infrastructure risks and vulnerabilities, mitigation techniques and recovery policies
- ▶ Governance relating to data protection, safe harbour and other compliance regimes
- ▶ Evaluation metrics

### Human Resource Management and Organisational Capability Development

- ▶ Managing human resources for optimal performance
- ▶ Organisational behaviour
- ▶ Developing and managing structures for continued capability growth
- ▶ Managing contractor arrangements and a contingent workforce
- ▶ Knowledge management
- ▶ Governance relating to data protection, safe harbour and other compliance regimes
- ▶ Evaluation metrics

### 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

Master of Arts (MA)

The final year expands your horizons even further, giving you the chance to develop your thought leadership and address specific business issues.

In your final module of the program, you will explore themes in the data centre 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 consultancy work which could address a live issue in your workplace, or be based on a theme in the data centre 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 Corporate Social Responsibility
- ▶ Technology advancements and implications
- ▶ Sustainability and environmental issues
- ▶ Globalisation and off-shoring
- ▶ Standards and quality management
- ▶ Other topics as identified by industry partners

### Research Methods and 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

## Find Out More

Visit our website to gain more insight into the Masters Degree in Data Centre Leadership and Management, or arrange to talk to a Tutor or a Graduate.

[cnet-training.com/masters-degree](http://cnet-training.com/masters-degree)