

Management



Certified Data Centre
Project Management

BTEC Level 5 Award



Certified Data Centre Project Management (CDCPM®)

Program Overview

Establish a robust project baseline and a comprehensive plan for a complex, high value data centre expansion project that demonstrates an accurate interpretation of the project scope and focuses on delivering project success in support of business strategy.

Working as a critical member of a multi-disciplinary project team, you will make a significant impact by exhibiting strong leadership qualities, optimising tools and processes to implement effective stage management to ensure product quality and financial control.

Driven by the exponential demand for data processing and storage, and the need to bring services closer to the customer (the edge), the pressure to deliver additional data centre facilities is a constant challenge for owners and operators. Highly skilled and dedicated project managers provide the confidence that facilitates the extension, build and renovation of facilities that contribute to the expansion of the global data centre footprint.

The comprehensive Certified Data Centre Project Management (CDCPM®) program is designed to provide in-depth knowledge into the application of processes, procedures, skills, knowledge and experience to deliver successful data centre projects. The program first invites learners to evaluate the personal attributes that contribute to developing a successful project manager and prioritises the main characteristics to consider.

Successful project management requires clear visibility of the organisational strategy and recognition of the importance of gaining maximum contribution from all project stakeholders. Situational awareness is key to proactivity, it enables managers to positively impact risk, have the foresight to accurately predict adverse outcomes and develop actions to prevent catastrophic failure of the project.

With a focus on a 'concept to closure' theme, the CDCPM® examines traditional principles and processes and tailors project management tools to the unique requirements of a critical infrastructure project. Tools such as Organisational Breakdown Structure (OBS), Work Breakdown Structure (WBS), Programme Evaluation Review Techniques (PERT), Critical Path Analysis (CPA) and Earned Value Analysis (EVA) are all utilised throughout the program.

The program also examines the evaluation techniques that determine the success of the project, or the lessons that need to be learned to improve future projects. This activity poses questions. Was the project completed on time/on budget? Was it completed to the right quality standard? Have the strategic business benefits been realised and was the risk profile managed effectively?

Following this program, you are encouraged to continue your professional development by advancing your knowledge and skills to gain further official certifications and qualifications by progressing through The Global Digital Infrastructure Education Framework which maps education programs to career advancement throughout the network infrastructure and data centre sectors.

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5 DAY PROGRAM

Learner Profile

This program is perfect for project managers seeking to employ their knowledge and skills within the data centre project environment. It is also ideal for those already working at a data centre looking to develop as a project manager.

Pre-requisites

Project management experience would be advantageous, along with previous experience in a relevant technical discipline. Learners at this level should be able to analyse, interpret and evaluate relevant information, concepts and ideas. Completion of the Certified Telecommunications Project Management (CTPM®) program would be an advantage. If you would like to discuss your experience or suitability for this program please contact us.

Program Requirements

Learners will be provided the opportunity to become familiar with project tools prior to program commencement, this will include working examples. You are strongly advised to take advantage as it will greatly assist your learning experience. Learners are required to have a webcam enabled laptop or suitable device with unrestricted wireless internet connectivity, the latest internet browser and suitable applications for reading/annotating PDFs and editing standard office documents.

Program Objectives

CDCPM® certified individuals will possess unrivalled knowledge, expertise and capability to deliver complex data centre projects.

Qualification

- ▶ Internationally and industry recognised BTEC Level 5 Award Certified Data Centre Project Management

Certification

- ▶ Official Certified Data Centre Project Management (CDCPM®) certification
- ▶ Use of CDCPM post nominal title
- ▶ Use of the CDCPM® logo
- ▶ Use of the official Certified Data Centre Project Management (CDCPM®) Digital Badge

Certifications are a commitment to life-long learning and offer the perfect portal to ensure knowledge, skills and certification remain current and up-to-date. Each certification gained requires re-certifying every three years via an online learning management system.

Additional Awards

- ▶ Continual Professional Development (CPDs)
- ▶ 3 IEEE Continual Education Units (CEUs)

CDCPM® Benefits for Individuals

- ▶ Develop competency in the use of a broad range of project management tools
- ▶ Gain technical knowledge and understanding of complex data centre build projects
- ▶ Increase confidence when interacting with project stakeholders
- ▶ Develop personal leadership and management attributes
- ▶ Demonstrate the ability to manage complex repeatable processes successfully

CDCPM® Benefits for Businesses

- ▶ Greatly improved business reputation through successful project delivery
- ▶ Reduce operational cost by delivering competent project management
- ▶ Demonstrate investment and development of the individual project managers and overall development of a successful team
- ▶ Create greater opportunities for repeat business from satisfied customers

Certified Data Centre Project Management (CDCPM®) Topics

CDCPM®

Data Centre Review:

- ▶ Data centre categories
- ▶ The 4 key constraints (the 4Cs):
 - ▶ Power
 - ▶ Cooling
 - ▶ Space
 - ▶ IT Infrastructure
 - ▶ Maintenance strategies

Data Centre Design Principles

- ▶ Examining opportunities for geographical location:
 - ▶ Live mapping natural disasters
 - ▶ Sustainability opportunities
 - ▶ Resource availability:
 - ▶ Power
 - ▶ Cooling
 - ▶ IT connectivity
 - ▶ People (skill sets)
 - ▶ Equipment
 - ▶ Transport
 - ▶ Cost effective solutions
 - ▶ Security
 - ▶ Local restrictions (e.g. noise pollution)
 - ▶ Local government incentives (e.g. financial, planning laws etc)
- ▶ Resilience modelling
- ▶ Cost
 - ▶ Construction costs
 - ▶ Operating costs
 - ▶ Power
 - ▶ Operations
 - ▶ Administration
 - ▶ Maintenance

The Multi-disciplined Team

- ▶ Recognise key stakeholders, understand lines of communications and project escalation. Engage with:
 - ▶ Strategic leadership
 - ▶ Workstream managers
 - ▶ Subject matter experts (SMEs)
 - ▶ The design team
 - ▶ The implementation team
 - ▶ Quality assurance
 - ▶ Safety and security

Understanding the Data Centre Build Project

- ▶ Scope of works and review process (avoidance of scope creep)
- ▶ Business drivers
 - ▶ Stakeholder relationships
 - ▶ Technical deliverables
 - ▶ Ongoing customer activities
 - ▶ Project controls

- ▶ Contractual constraints and disturbances
- ▶ Utility and vendor services
- ▶ Communication
- ▶ Escalation management and decision making
- ▶ Documentation
- ▶ Project closure
- ▶ Measuring success
- ▶ Writing lessons learnt
- ▶ Improving organisational projects

Attributes of a Project Manager

- ▶ Understand management concepts
- ▶ Communication style (e.g. internal and external)
- ▶ Decision making
- ▶ Inter-personal relationships
- ▶ Delegation skills
- ▶ Ability to meet key project objectives
- ▶ Competence (e.g. appropriate technical knowledge)

Project Management Principles

- ▶ Appreciate the role of the project manager in a multi-disciplined high-value project
- ▶ Core principles
- ▶ Develop a clear understanding of the project objectives and critical deliverables
- ▶ Create a structured plan defining the pathway to achievement
- ▶ Monitor and manage project activities to maintain anticipated progress
- ▶ Evaluate performance and develop appropriate strategies

Project Management Processes

- ▶ Project scope development (needs to be agreed and baselined)
- ▶ Project estimation reviews
- ▶ Quality planning
- ▶ Quality control
- ▶ Change management process
- ▶ Configuration management processes
- ▶ Health & safety (including CDM)
- ▶ Stakeholder communications
 - ▶ Project meetings
 - ▶ Project reporting
- ▶ Project deviation impact analysis
 - ▶ Cost fluctuation
 - ▶ TCO, ROI re-alignment

- ▶ Customer satisfaction
- ▶ Commissioning
- ▶ Handover procedure & customer training
- ▶ Project closure and payment

Project Management Tools

- ▶ Organisation and Work breakdown Structures (OBS/WBS)
- ▶ Precedence diagramming (project plan/program)
- ▶ Program Evaluation Review Techniques (PERT)
- ▶ Critical Path Analysis (CPA)
- ▶ Earned Value Management (EVM)
- ▶ GANTT
 - ▶ Task planning
 - ▶ Resource levelling
 - ▶ Deconfliction
- ▶ Risk management:
 - ▶ Risk Breakdown Schedule (RBS)
 - ▶ Quantitative Risk Management (QRM)
 - ▶ Risk Assumptions Issues and Dependencies (RAID)

