# Information Management Fundamentals + CDMP Professional Certification

#### **Overview**

This course addresses ALL the Information Management disciplines as defined in the International Industry standard, DAMA body of knowledge (DMBoK) v2. Taught by an industry recognized DAMA DMBoK (2.0) author and CDMP<sub>(Fellow)</sub> this course provides a solid foundation of the different information disciplines across the complete Information Management spectrum.

By attending the course, delegates will get a firm grounding of the core Information Management concepts and illustrate their practical application with real examples of how Information Architecture is applied. Additionally, this course provides a solid foundation for any students wishing to take the Industry professional certification the DAMA Certified Data Management Professional (CDMP).

The course is designed and taught by the VP of Professional Development for DAMA International, author of "Data Modelling for the Business" an industry recognized DAMA DMBoK (2.0) author, DAMA CDMP<sub>(Fellow)</sub>, Past President of DAMA UK, author & examiner of the professional CDMP certification and recipient of the DAMA Lifetime Achievement Award for Data Management Excellence.

The course describes the different levels of the CDMP certification, and helps students consolidate their existing Information Management experience by reinforcing Data management topics contained in the CDMP syllabus at the different levels.

This 5-day course addresses all the Information Management disciplines as defined in the DAMA body of knowledge (DMBoK v2.0) including the "new" discipline of "Data Integration" introduced in DMBoK 2. Students will cover the whole syllabus of the DM Fundamentals examination covering all the Data Management Disciplines (Knowledge Areas) and practice for the CDMP Examination with sample questions form each area.

Finally, students can sit the live CDMP examinations on the final day of this course and could leave having achieved this internationally recognized professional certification.

### **Learning Objectives**

This course provides students with the knowledge, methods and techniques required to analyse, mature and implement information management solutions within your organisation. It affords a solid grounding in all the different disciplines of Data Management. In addition, if students wish to take the CDMP certification they will gain familiarity with the CDMP examination format, types of questions and the most appropriate way of answering them. They will understand and revise the major syllabus points. Attempt practice questions in preparation for sitting examinations.

Areas covered include:

- Data Governance
- Data Quality Management
- Master and Reference Data Management
- Business Intelligence & Data Warehousing
- The essential role of Data modelling



- Data Lifecycle Management
- Metadata Management
- Risk, Security & Regulatory compliance
- Data Operations
- Content & Records management
- Data Integration & Interoperability

There are 4 levels of accomplishment for the CDMP certification, Associate, Practitioner, Master, and Fellow.

#### **Associate Level:**

Recommended 2+ years relevant Data Professional work experience 1 examination (Data Management Fundamentals). Pass mark is 60%

#### **Practitioner Level:**

Recommended 3-5 years relevant Data Professional work experience 3 examinations (Data Management Fundamentals + 2 specialist).

Pass mark for all 3 exams 70%

#### **Master Level:**

Required 10+ years relevant Data Professional work experience 3 examinations (Data Management Fundamentals + 2 specialist). Pass mark for all 3 exams 80% Written case study reviewed by CDMP Fellow

#### Fellow:

By appointment only

Completion of all previous levels,

Recognised exceptional works & contributions in the Data Management field

Published author

25+ years' experience

#### The 2 specialist exams must be chosen from the following set:

Data Governance and Stewardship
Data & Information Quality
Data Modelling
Data Warehousing & Business Intelligence
Metadata Management
Data Integration & Interoperability
Master and Reference Data Management.



At the end of the course, delegates would have gained the following:

#### Level set understanding & terminology:

- Learn about the need for and the application of Information Management disciplines for different categories of challenges
- Explore an Information Management framework and understand how it aligns with other architecture frameworks
- Explore concepts such as lifecycle management, normalisation, dimensional modelling and data virtualisation and appreciate why they are important
- Understand the critical roles of Master Data Management and Data Governance and how to effectively apply them

#### **Pragmatic Learning**

- Learn the different MDM architectures, their suitability for different needs and how best to implement Master Data Management approaches;
- Understand the different facets (dimensions) of Data Quality and explore a workable Data
   Quality framework;
- Discover the major considerations for successful Data Governance and how it can be introduced in bite-sized pieces;
- Develop a set of usable techniques that can be applied to a range of information management challenges
- Learn the best practices for managing Enterprise Information needs
- Through practical examples, learn how to apply techniques in information architecture planning

#### **CDMP Certification**

- Understand the syllabus for the CDMP professional certification
- Revise all the areas for the Data Management Fundamentals examination.
- Take practice questions for all areas of the exam syllabus.
- Students can leave this course having attained their CDMP (Associate) certification. The
   Data Management Fundamentals exam is taken at the end of day-5 of the course.

#### **Course Schedule:**

## Day 1: Introduction to Data Management, DMBoK & pathways through the CDMP certification:

- What is Data Management, the drivers and issues if it goes wrong.
- What is the DMBoK, its intended purpose and audience of the DMBoK.
- What are the disciplines of Data Management in the DMBoK
- Changes in DMBoK 2., and the relationship of the DMBoK with other frameworks (TOGAF / COBIT etc.).
- Overview of available professional certifications.
- DAMA CDMP professional certification overview & CDMP exam coverage by DMBoK 2 section.
- What is the CDMP, what are the levels, what are the DAMA specialist certifications and how can you progress from one level to the next.



#### **Day 1: Data Management Process**

- What is Data Management
- The Information value chain
- The Information life cycle vs the Systems Development life cycle
- Drivers for data management
- Components of data management

#### **Day 1: Data Quality Management**

- The different facets of Data Quality, and why Validity is often confused with Quality
- The Dimensions of Data Quality.
- The policies, procedures, metrics, technology and resources for ensuring Data Quality is measured and ultimately continually improved.
- A Data Quality reference model & how to apply it.
- Root cause analysis & the "5-whys" approach
- Capabilities & functionality of tools to support Data Quality management.
- Data Quality measures guidelines for their creation & monitoring.
- Common myths & pitfalls about Data Quality management & how to avoid them.

#### Day 2: Data Modelling & Design

- What are Data Models & why do we need them.
- Different types of Data models, their use and how they interrelate
- The development, and exploitation of data models, ranging from Enterprise, through Conceptual to Logical, Physical and Dimensional.
- Business conceptual data models
- Physical data models & design
- A maturity assessment to consider the way in which models are utilized in the enterprise and their integration in the System Development Life Cycle (SDLC).
- Data modelling & Big Data why data modelling is NOT just about Relational Database design
- Data Modelling an essential component of Data Governance

#### Day 2: Master & Reference Data Management

- The differences between Reference & Master Data.
- How to identify and manage Master Data across the enterprise.
- 4 generic MDM architectures & their suitability in different cases.
- An MDM maturity assessment to consider business procedures for MDM and the provision and appropriateness of MDM solutions per major data subject area.
- How to incrementally implement MDM to align with business priorities.
- Categories of MDM solutions
- Approaches for MDM implementation
- The essential relationship between MDM, DQ and DG



• The under looked but critical aspect of Reference Data Management

#### Day 3: Data Warehousing & BI Management & Big Data

- What is a Data Warehouse & why are they used.
- Provision of Business Intelligence (BI) to the enterprise and the way data consumed by BI solutions and the resulting reports are managed. Particularly important if the data is replicated into a Data Warehouse.
- The major DW architectures (Inmon & Kimball)
- Introduction to Dimensional Data Modelling
- Types of BI, DW, Analytics & Visualisations.
- Big Data (included in the DAMA DM Fundamentals examination)

#### Day 3: Data Risk Management, Security, Privacy & Regulatory compliance

- Identification of threats and the adoption of defences to prevent unauthorized access, use or loss of data and particularly abuse of personal data.
- Exploration of threat categories, defence mechanisms & approaches, and implications of security
   & privacy breaches.
- Identification of risks (not just security) to data and its use, together with risk mitigation, controls and reporting.
- Adapting to the changing legal and regulatory requirements related to information and data.
- Assessing the approach to regulatory compliance & understanding the sanctions of noncompliance.
- Data Management considerations for different regulations, e.g. GDPR, BCBS239

#### Day 3: Document, Records & Content Management

- Why document & records management is important
- The records management lifecycle
- Significant Records
- Audit and records control
- Document control schemes

#### **Day 4: Metadata Management**

- What is (and isn't) Metadata
- Provision of metadata repositories and the means of providing business user access and glossaries from these.
- Types of Metadata & their uses
- Sources of metadata
- Metadata & Business Glossaries. What's the connection?
- The uncomfortable truth about Big Data technologies



#### Day 4: Data Architecture & Data Lifecycle Management

- Types of Architectures
- Proactive planning for the management of Data across its entire lifecycle from inception through, acquisition, provisioning, exploitation eventually to destruction.
- Considerations for Data across the value chain.
- Differences between Data Life cycle & a Systems Development LifeCycle (SDLC).

#### **Day 4: Data Operations Management**

- · Core roles & considerations for data operations
- Obstacles to performance
- Good Data Operations practices

#### **Day 5: Data Governance**

- What is Data Governance.
- Why Data Governance is at the heart of successful Information Management.
- A typical DG reference model.
- DG roles & responsibilities.
- Organisation structures & type of Operating models to support Data Governance.
- Principles for Data Governance
- The role of the Data Governance Office (DGO) & its relationship with the PMO.
- How to get started with Data Governance.
- Data Ethics (included in the DAMA DM Fundamentals examination)

#### Day 5: Data Integration & Interoperability

- Data integration & Data interoperability What's the difference?
- What are the business (and technology) issues that Data Integration is seeking to address?
- Different styles of Data Integration & Interoperability, their applicability and implications.
- The approaches, plans, considerations and guidelines for provision of Data Integration and access.
- Consideration of P2P, ETL, CDC, Hub & Spoke, Service-orientated Architecture (SOA), Data Virtualization and assessment of their suitability for the particular use cases.

#### Day 5: Data Management Tools & Repository (overview ... not part of CDMP)

- Examination of the categories of tools supporting the IM disciplines.
- How to select the appropriate toolset.
- Discussion of an example policy for use of specific technology to ensure consistency and interoperability across the enterprise.



#### **Audience**

Practitioners who seek to gain an overview of the different disciplines of Information Management and those seeking Professional recognition and certification for Information Management including:

- Business Intelligence & Data Warehouse developers & architects
- Data Modellers
- Developers
- Data Architects
- Data Analysts
- Enterprise Architects
- Solution Architects
- Application Architects
- Information Architects
- Business Analysts
- Database Administrators
- Project / Programme Managers
- IT Consultants
- Data Governance Managers
- Data Quality Managers
- Information Quality Practitioners



**Tutor Biography** 

Christopher Bradley has spent 40 years in the forefront of the Information Management field, working for International organisations in Information Management Strategy, Data Governance, Data Quality,

Information Assurance, Master Data Management, Metadata Management, Data Warehouse and

Business Intelligence.

Chris is an Information Strategist and a recognised thought leader. He advises clients including:

Alinma Bank, American Express, ANZ, British Gas, Bank of England, BP, Celgene, Cigna Insurance, EDP,

Emirates NBD, Enterprise Oil, ExxonMobil, GSK, HSBC, NAB, National Grid, Riyad Bank, SABB, SAMA,

Saudi NIC, Saudi Aramco, Shell, Statoil, and TOTAL.

He is VP of Professional Development for DAMA-International, the inaugural Fellow of DAMA, past

president of DAMA UK. He is an author of the DMBoK 2.0 and author and examiner for professional

certifications. In 2016 Chris received the lifetime achievement award from DAMA International for

exceptional services to furthering Data Management education & to the International Data Management

community.

Recently he has delivered a comprehensive appraisal of Information Management practices at an Oil &

Gas super major, Data Governance strategy for an Energy Utility, and developed an Information

Management training program for a Government Organisation.

Chris guides Global organizations on Information Strategy, Data Governance, Information Management

best practice and how organisations can genuinely manage Information as a critical corporate asset.

Frequently he is engaged to evangelise the Information Management and Data Governance message to

Executive management, introduce data governance and new business processes for Information

Management and to deliver training and mentoring.

Chris is Director of the E&P standards committee "DMBoard", sits on several International Data Standards

committees, teaches at several Master's Degree University Classes Internationally. He authored "Data

Modelling for the Business", is a primary author of DMBoK 2.0, a member of the Meta Data Professionals

Organisation (MPO) and a holder at "Fellow" level of CDMP and examiner for several professional

certifications.

Chris is an acknowledged thought leader in Data Governance, author of several papers and books, and an

expert judge on the annual Data Governance best practice awards.

Email: Chris.Bradley@dmadvisors.co.uk

Blog: http://infomanagementlifeandpetrol.blogspot.com/

Twitter @Inforacer

