



MSc Data Management Programme Specification

1. General Information

UCAS Code	Award	Programme Title	Expected Duration	Study Mode
N/A	MSc	Data Management	1 year 1.5 years 2 years	Full-time Part-time 1 Part-time 2
		Programme Code		
		UK-LIBF-MADM		
	Exit Awards	<ul style="list-style-type: none"> • Postgraduate Diploma • Postgraduate Certificate 		

Credit Count	180 FHEQ credits
Awarding Institution	The London Institute of Banking & Finance
Teaching Institution	The London Institute of Banking & Finance
Delivery Modes	<ul style="list-style-type: none"> • Face-to-face • Blended • Online - Synchronous • Online - Asynchronous

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2. Programme Overview

Programme Summary

In an era where data is the new oil, the need for professionals who can effectively manage, process, and leverage data is growing exponentially. The MSc Data Management programme is designed to equip you with the comprehensive understanding and practical skills necessary to navigate the complex landscape of data management, enabling you to drive innovation and growth in a variety of industries and rapidly changing business environments.

The core modules of the programme cover a wide range of topics, providing a well-rounded understanding of data management. These include Concepts in Data Management, Big Data Technologies, and Data Warehousing, Pipelines, and Orchestration. Additionally, the seminar allows you to explore the ethical implications and societal impact of data management.

In addition to the core modules, the programme offers a range of elective modules, such as Internet of Things, Master Data Management, and Data Query Languages. These electives allow you to delve deeper into specific areas of interest and align the programme with your career goals, providing a broader perspective on the field of data management.

Upon completion of the MSc Data Management programme, you will be well-equipped to pursue a range of careers, navigating the complexities of data-rich environments and making strategic data-driven decisions.

Programme Aims

The MSc Data Management aims to

- equip you with a comprehensive understanding of the principles, theories, and practices in data management;
- develop your ability to design, implement, and manage data projects effectively, using a range of technologies and methods;
- enhance your critical thinking and analytical skills to evaluate and apply current research and concepts in data management, and to independently propose innovative solutions;
- provide you with a solid ethical foundation to consider and address societal implications in data management practices; and
- encourage you to become a lifelong learner, committed to continuous personal and professional development to stay abreast of emerging trends and technologies in the field of data management.

Employability & Graduate Outcomes

Graduates of this programme are likely to pursue careers in a number of areas in data management and IT-related fields including data analysis, database administration and data

project management. This programme of study supports graduates in developing the following employability skills:

- Technical and digital proficiency
- Critical thinking skills
- Problem-solving skills
- Organizational skills
- Research skills
- Ethical awareness

3. Intended Learning Outcomes of the Programme

This programme has been developed in accordance with the QAA Subject Benchmark Statement for Computing (C) (2022).

Please note: The programme's intended learning outcomes below are described at Master's level (Level 7).

On successful completion of this programme, you will be expected to:

LO1	Demonstrate a critical understanding of the key concepts and theories in data management and their practical applications in various contexts.
LO2	Demonstrate a systematic understanding of the different phases of the data lifecycle to design and manage complex, reliable data systems.
LO3	Apply advanced data orchestration techniques to structure and organise data according to different contexts and requirements.
LO4	Critically apply concepts and methodologies of the data processing and storage stages of the data life cycle, considering their strengths and limitations.
LO5	Analyse the requirements of complex projects using advanced data management techniques, including the relevant data processing and storage technologies.
LO6	Critically examine the strengths and weaknesses of different storage solutions to make informed decisions based on specific scenario requirements.
LO7	Critically evaluate the benefits and drawbacks of distributed data architectures, open-source and managed big data technologies.
LO8	Critically investigate data protection concepts and technical solutions to ensure the security of modern data systems.
LO9	Evaluate the expected data access patterns to recommend appropriate technical solutions to data management problems.

LO10	Critically evaluate the ethical and societal considerations in data management when designing and managing data systems.
LO11	Apply advanced research methodologies to plan and execute relevant research projects in the field of data management, including critiquing the current research, the evaluation and interpretation thereof to present original arguments and insights using self-direction.

4. The Structure of the Programme

The MSc Data Management programme is offered as a 1-year full-time programme or in part-time mode over a 1.5 or 2-year period. In full-time mode you will complete 5 modules each semester, in part-time 1 mode you will complete 4 modules each semester, and in part-time 2 mode you will complete 3 modules each semester.

The programme is divided into modules which include both compulsory and elective modules weighing 15 credits each and a thesis weighing 45 credits. All modules in the programme are assigned to Level 7.

To achieve the full Master's award, students need to complete modules with a combined weight of 180 credits, including the final thesis.

Table 1: Structure of the Programme

FT	PT 1	PT 2	Module Code	Module Name	Credit	Compulsory/ Elective
Semester 1	Semester 1	Semester 1	LIBFEXDLMDMCDM	Concepts in Data Management	15	C
			LIBFWAWADLMBIRND	Relational and NoSQL Databases	15	C
			LIBFWAWADLMARM	Advanced Research Methods	15	C
	Semester 2	Semester 2	LIBFOARPDLMDSBDT	Big Data Technologies	15	C
			LIBFWACSDLMDMDWPO	Data Warehousing, Pipelines and Orchestration	15	C
Semester 2	Semester 2	Semester 3	LIBFOARPDLMDMMDP	Managing Data Projects	15	C
			LIBFOARPDLMCSITSDP	Cyber Security and Data Protection	15	C
			LIBFWAREDLMDMSESC	Seminar: Ethic & Societal Considerations in Data Management	15	C

	Semester 3		Elective	15	E
		Semester 4	LIBFMTMMTHE	Master Thesis	45

Table 2: List of Electives

Module Code	Module Name	Credit	Subject Area
LIBFEXDLMBMMIIT1	Internet of Things	15	n/a
LIBFEXMDM	Master Data Management	15	n/a
LIBFWAPRDLMDEDM1	Leveraging Data Sources & Data Mining	15	n/a
LIBFEXDLMBDSA1	Data Science	15	n/a
LIBFOARPDLMDESE1	Data Engineering	15	n/a
LIBFWAPRPAIECPT	Project: AI Excellence with Creative Prompting Techniques	15	n/a
LIBFOARPDLMMDQL	Data Query Languages	15	n/a
LIBFEXDLMAIAI	Artificial Intelligence	15	n/a
LIBFIRPFSINTER	Internship ¹	15	n/a

5. Teaching, Learning and Assessment

Information about teaching, learning and assessment can be found in the Teaching, Learning and Assessment Strategy.

Our programmes are designed to:

- integrate theory with practice,
- develop your ability to critique and challenge models and theoretical frameworks,
- stimulate debate, discussion, and research,
- foster a variety of academic skills,
- be accessible and inclusive,

¹ Check eligibility before booking the module.

- develop global citizens.

You are expected to undertake a considerable amount of independent study, including reading, industry-related research, and personal reflection.

Teaching Formats

The programme may be offered in various teaching formats, for example online or via blended learning.

You will have access to both asynchronous and synchronous teaching formats.

Via the Course Feed in the virtual learning environment, myCampus, you will be able to contact the module tutor in a flexible and accessible way.

This is also where Intensive Live Sessions are conducted synchronously with video-based elements. They serve to answer students' individual questions as well as to allow for group discussions.

Additionally, Learning Sprints² will offer a seven-week intense learning experience in which the lecturers guide students through the learning material in a very structured manner, with the goal of successfully preparing them to take the final assessment at the end. During this time, frequent synchronous online meetings are held, offering keynote speeches and interactive tasks.

Both the Intensive Live Sessions and Learning Sprints are recorded to further assist asynchronous learning.

In the blended format, teaching and learning combines online and in-person learning in a flipped classroom concept. Traditional classroom activities like lectures are conducted online via the learning platform, while in-class time is used for interactive work. On-campus elements like study groups and library study time complement this approach.

Learning Resources

You will have access to a wide range of resources, which may include the following:

- myCampus: This Moodle-based central information and digital learning platform is organized based on programmes and modules. On the respective module pages in myCampus, you can access all study materials (e.g., course books (i.e., text books), reading lists, practice exams, and video galleries) as well as the links to all related resources and databases (e.g., MS Teams, links to the library for further reading, contact details of lecturers, links to the booking tool for online exams, and the Turnitin submissions page). In the blended model you have access to the same learning platform, with slight adaptations made to accommodate, for example, differences in study sequence.
- Learnhub App: You can access your learning materials in a digital app and have all your notes and highlights synchronised. The app supports different learning formats, such as reading and annotating course books using different colour codes, assessing

² Offered only when the minimum number of participants is reached.

knowledge with interactive self-tests, or watching the latest videos of the current module.

- Our comprehensive online library is aligned with the study content and kept up to date. Compulsory and further reading is mentioned in the course and module descriptions available for the students and aims to provide them with unlimited access.

Assessment & Feedback

Regulations relating to progression and assessment, including information on late submissions, are as set out in The London Institute of Banking & Finance's General and Academic Regulations for Students.

Assessment strategies follow The London Institute of Banking & Finance's Higher Education Accessible and Inclusive Learning Policy.

Assessment consists of both formative and summative approaches, and feedback and feedforward are provided as outlined in the London Institute of Banking & Finance's Higher Education Assessing Learning & Feedback Policy. The different types of assessment used by the London Institute of Banking & Finance are described in the Higher Education Types of Summative Assessment Guidance.

Module assessment methods are included in Module Handbooks which are made available in myCampus.

6. Credit and Award

Credit Framework

The MSc Data Management is made up of 180 FHEQ credits. One credit approximates to 10 student effort hours; therefore, the total course requires an average of 1,800 hours effort. Typically, one ECTS credit is the equivalent to two UK credits, although this may vary depending on the individual European state's requirements.

Award

On successful completion of the full programme, you will be awarded the MSc Data Management.

Regulations

The London Institute of Banking & Finance's General and Academic Regulations for Students detail

- regulations governing the award of credit,

- how grades for awards are granted,
- time limits for completion of programmes of study, and
- capping of marks and regulations relating to the resitting of assessment components
- academic misconduct e.g., malpractice, and
- accreditation of prior learning (APL).

Exit Awards

In line with The London Institute of Banking & Finance’s General and Academic Regulations for Students, the following applies:

Postgraduate Certificate (PgCert)	minimum of 60 credits, of which at least 40 credits must be at Level 7
Postgraduate Diploma (PgDip)	minimum of 120 credits, of which at least 90 credits must be at Level 7

Note: The London Institute of Banking & Finance does not award interim qualifications. For example, a student registered for the Master’s degree will not automatically be awarded a Postgraduate Diploma or Certificate on completion of the required number of credits.

7. Professional Recognition

Credits gained via accreditation of prior learning (APL) into our awards may mean that students will not get certain exemptions from other institutions’ higher education or professional awards that may recognise our programmes.

8. Criteria for Admission

Normally, successful applicants will possess a 2.2 Honours degree (or equivalent) from a recognised institution.

Applicants not possessing this requirement may be considered if they can demonstrate their ability to achieve at this level and contribute to the debates, discussions, and work of the learning set. In this case, applicants may be interviewed and / or required to submit a piece of written work in addition to their application to enable an assessment to be made of their suitability for the programme.

Applicants for whom English is not their first language would be expected to demonstrate their competence through achieving an IELTS score of 6.5 or above with no element below 6.0 (or equivalent). An online English test is offered (SPEEX) if IELTS not available. Alternatively, evidence you have previously studied in English at an appropriate level and at a recognised institution, may be accepted.

9. Benchmarks

External

- QAA UK Quality Code, including:
 - Subject Benchmark Statement for Computing (2022)
 - Level 7 descriptors in the Framework for Higher Education Qualifications in England, Wales and Northern Ireland
 - Master's degree characteristics
 - The Frameworks for Higher Education Qualifications of UK Degree Awarding Bodies (FHEQ)

Internal

- The London Institute of Banking & Finance Code of Practice
- The London Institute of Banking & Finance General and Academic Regulations for Students

In addition, research with the relevant sector has been undertaken to ensure that the learning outcomes of the programme addresses identified skills and knowledge gaps.

10. Links

Teaching, Learning and Assessment Strategy

[The London Institute of Banking & Finance's General and Academic Regulations for Students](#)

[The London Institute of Banking & Finance's Code of Practice for Quality Assurance, Chapter 3: Accreditation of Prior Learning \(APL\)](#)

Accessible and Inclusive Learning Policy

Types of Summative Assessment

Higher Education Assessing Learning & Feedback Policy

[Subject Benchmark Statement for Computing](#)

[Framework for Higher Education Qualifications in England, Wales and Northern Ireland](#)

[Characteristics Statement: Master's Degree](#)

[Higher Education Credit Framework for England](#)

11. Curriculum Map of Modules against Intended Learning Outcomes of Programme

Module Code	Module Name	Compulsory / Elective	Programme Learning Outcomes											
			LO1	LO2	LO3	LO4	LO5	LO6	LO7	LO8	LO9	LO10	LO11	
LIBFEXDLMDMCDM	Concepts in Data Management	C	X	X	X	X	X	X	X	X	X			
LIBFWAWADLMBIRND	Relational and NoSQL Databases	C	X			X	X	X	X			X		
LIBFWAWADLMARM	Advanced Research Methods	C												X
LIBFOARPDLMDSBTD	Big Data Technologies	C	X	X		X	X	X	X			X		
LIBFWACSDLMDMDWPO	Data Warehousing, Pipelines and Orchestration	C	X	X	X	X								
LIBFOARPDLMDMMDP	Managing Data Projects	C	X	X			X							
LIBFOARPDLMCSITSDP	Cyber Security and Data Protection	C	X							X	X		X	
LIBFWAREDLMDMSESC	Seminar: Ethic & Societal Considerations in Data Management	C									X		X	X
LIBFEXDLMBMMIIT1	Internet of Things	E			X	X				X				
LIBFEXMDM	Master Data Management	E	X					X				X		
LIBFWAPRDLMDMEDM1	Leveraging Data Sources & Data Mining	E		X										
LIBFEXDLMBDSA1	Data Science	E		X										
LIBFOARPDLMDSEDE1	Data Engineering	E	X	X		X	X			X	X			

LIBFWAPRPAIECPT	Project: AI Excellence with Creative Prompting Techniques	E		X										
LIBFOARPDLMMDQL	Data Query Languages	E			X									
LIBFEXDLMAIAI	Artificial Intelligence	E		X										
LIBFIRPFSINTER	Internship	E					X			X	X			
LIBFMTMMTHE	Master Thesis	C	X	X		X	X			X		X	X	
<p>This table shows the distribution of the programme's intended learning outcomes (as specified in the programme specification) across the programme modules.</p>														

12. Mapping of Teaching Formats and Types of Media used in the Programme Modules

Module Code	Module Name	Compulsory / Elective	Type of Assessment ¹	Teaching Formats ²			Types of Media ³					
				CF	ILSE	LS ⁴	CB	RL	OT	RB	V	PE
LIBFEXDLMDMCDM	Concepts in Data Management	C	EX	X	X	X	X	X	X		X	X
LIBFWAWADLMBIRND	Relational and NoSQL Databases	C	WAWA	X	X	X	X	X	X		X	
LIBFWAWADLMARM	Advanced Research Methods	C	WAWA	X	X	X	X	X	X		X	
LIBFOARPDLMDSBDT	Big Data Technologies	C	OARP	X	X	X	X	X	X		X	
LIBFWACSDLMDMDWPO	Data Warehousing, Pipelines and Orchestration	C	WACS	X	X	X	X	X	X		X	
LIBFOARPDLMMDMDP	Managing Data Projects	C	OARP	X	X	X	X	X	X		X	
LIBFOARPDLMCSITSDP	Cyber Security and Data Protection	C	OARP	X	X	X	X	X	X		X	
LIBFWAREDLMDMSESC	Seminar: Ethic & Societal Considerations in Data Management	C	WARE	X	X	X						
LIBFEXDLMBMMIIT1	Internet of Things	E	EX	X	X	X	X	X	X		X	X
LIBFEXMDM	Master Data Management	E	EX	X	X	X	X	X	X		X	X
LIBFWAPRDLMDEDM1	Leveraging Data Sources & Data Mining	E	WAPR	X	X	X	X	X	X		X	X
LIBFEXDLMBDSA1	Data Science	E	EX	X	X	X	X	X	X		X	X
LIBFOARPDLMDESE1	Data Engineering	E	OARP	X	X	X	X	X	X		X	
LIBFWAPRPAIECPT	Project: AI Excellence with Creative Prompting Techniques	E	WAPR	X	X	X		X				

LIBFOARPDLMMDQL	Data Query Languages	E	OARP	X	X	X	X	X	X		X	
LIBFEXDLMAIAI	Artificial Intelligence	E	EX	X	X	X	X	X	X		X	X
LIBFIRPFSINTER	Internship	E	IRP	X	X	X						
LIBFMTMMTHE	Master Thesis	C	MT									

This table shows the distribution of teaching formats and types of media used in the programme modules

¹EX = Exam, WAWA = Written assignment, WACS = Case study, WARE = Research essay, WAPR = Project report, P = Portfolio, AW = Advanced Workbook, OARP = Oral Assignment + Reflection Paper, OPRRP = Oral Project Report + Reflection Paper, BT/MT = Bachelor / Master Thesis

²CF = Course Feed, ILSE = Intensive Live Sessions, LS = Learning Sprints

³CB = Course Book, RL = Reading List, OT = Online Test, RB = Review Book, V = Videos, PE = Practice Exams

⁴Offered only when the minimum number of participants is reached.