INTERNATIONAL QUALIFICATIONS

AND ASSESSMENT CENTRE (IQAC)

«Approved»

2025 y. «___»_____
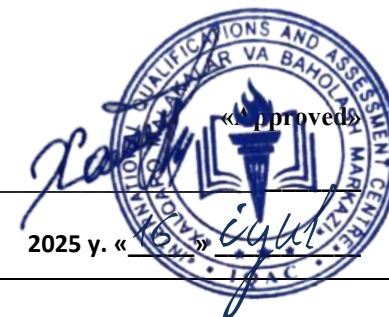
Programme	**Level 7 Diploma in Data Science**
Unit Number/ Unit Title	UNIT 5 STRATEGIC DATA LEADERSHIP AND INNOVATION
Cohort Code:	L07SDLI-U5
Unit Level	Level 7
Total GLH	Total qualification time 200/ Total Guided learning hours 90/ Self-guided learning hours 110
Credits	20 CATS/ 10 ECTS
Lecturer	
Start Date		**End Date**	

Unit Aims	This unit prepares students for strategic leadership roles in data-driven organisations. It focuses on the intersection of data strategy, innovation, organisational change, and data governance. Students will learn to align data initiatives with business goals and lead cross-functional teams to create value through analytics and innovation.
Differentiation Strategies *(e.g. planned activities or support for individual learners according to their needs)*	The total number of students to be in the lesson is approximately 20. This is a multicultural group of students predominantly between the ages of 24 – 45, with numerous ethnic, gender, and creed background. These are UK academic level 5 students; hence it is assumed that they have practical, theoretical, or technological knowledge and understanding of a subject or field of work to find ways forward in broadly defined, complex contexts. These students must be able to generate information, evaluate, synthesise the use information from a variety of sources. Various approaches to addressing the various identified students needs will be adopted throughout the lesson. Such will include:- 1. Progressive tasks 2. Digital resources

	3. Verbal support 4. Variable outcomes 5. Collaborative learning 6. Ongoing assessment 7. Flexible-pace learning
Equality & Diversity	Variety of teaching techniques will be employed to ensure that the needs of each individual learner are met.
Safeguarding & Prevent	Safeguarding policies and the Prevent duty are strictly observed to ensure the safety, well-being, and inclusivity of all students and staff.
Health & Safety	SIRM H&S policies will be maintained.
Learning Resources	**Teaching and Learning Materials**
	• Marr, B. (2019). Data Strategy: How to Profit from a World of Big Data, Analytics and the Internet of Things. Kogan Page. • Redman, T. (2018). The Data Driven Leader. Wiley. • Power, D. J. (2021). Data-Driven Decision Making and Digital Transformation. Business Expert Press. • McAfee, A., & Brynjolfsson, E. (2017). Machine, Platform, Crowd. W. W. Norton.

Learning Outcome	Assessment Criteria
LO1. Formulate data strategy aligned with business objectives.	**Strategy Document**: 1.1 Define components of a data-driven business strategy. 1.2 Evaluate alignment with organisational KPIs and vision.
LO2. Assess data governance and management practices.	**Report**: 2.1 Analyse data stewardship, quality, and access control. 2.2 Review compliance with data regulations (e.g., GDPR).
LO3. Develop frameworks for innovation and digital transformation.	**Presentation**: 3.1 Propose a roadmap for analytics-driven innovation. 3.2 Use change management models (e.g., Kotter, ADKAR).
LO4. Demonstrate leadership capabilities in managing data teams.	**Reflective Portfolio**: 4.1 Identify leadership styles suitable for analytics projects. 4.2 Reflect on personal leadership development and team management.

No	Learning Outcome / Topic	Learning and Teaching Activities	Which assessment criteria does the session relate to?	Day/month/year/ signature
1.	**Introduction to Data Strategy**	**Introduction to Data Strategy** Components: People, processes, technology, governance	LO1: Data Strategy & Business Alignment	
2.	**Data-Driven Decision Making**	**Data-Driven Decision Making** Case studies: Netflix, Amazon, Tesla	LO1: Data Strategy & Business Alignment	
3.	**Aligning Data Strategy with Business Goals**	**Aligning Data Strategy with Business Goals** OKRs (Objectives & Key Results), balanced scorecard	LO1: Data Strategy & Business Alignment	
4.	**Assessing Organizational Data Maturity**	**Assessing Organizational Data Maturity** CMMI, DAMA-DMBOK frameworks	LO1: Data Strategy & Business Alignment	
5.	**Stakeholder Engagement**	**Stakeholder Engagement** Bridging gaps between data teams and executives	LO1: Data Strategy & Business Alignment	
6.	**Data Governance Frameworks**	**Data Governance Frameworks** Roles (CDO, data stewards), policies, standards	LO2: Data Governance & Compliance	
7.	**Data Quality Management**	**Data Quality Management** Metrics (accuracy, completeness), root cause analysis	LO2: Data Governance & Compliance	
8.	Half-Term Exam	- Review of LO1 topics - Practice questions and mock assessment - **Half-term assessment** based on LO1 (theory)	LO1 LO2	
9.	**Master Data Management (MDM)**	**Master Data Management (MDM)** Golden records, entity resolution	LO2: Data Governance & Compliance	

10.	**Regulatory Compliance**	**Regulatory Compliance** GDPR, CCPA, sector-specific laws (HIPAA, FINRA)	LO2: Data Governance & Compliance	
11.	**Ethical Data Use**	**Ethical Data Use** Bias mitigation, transparency, consent management	LO2: Data Governance & Compliance	
12.	**Digital Transformation Roadmaps**	**Digital Transformation Roadmaps** Phases: Digitization → Digitalization → Transformation	LO3: Innovation & Digital Transformation	
13.	**Analytics-Driven Innovation**	**Analytics-Driven Innovation** AI/ML use cases, predictive vs. prescriptive analytics	LO3: Innovation & Digital Transformation	
14.	Final Exam Preparation & Review	- Comprehensive review of all learning outcomes - Practice questions and revision of key topics		
15.	Final Exam	- **Final-term assessment** covering all learning outcomes (theory and practical elements)		
16.	Feedback & Reflection	- Review of final exam - Individual feedback on performance - Reflective discussion on key learning points		
17.	**Change Management Models**	**Change Management Models** Kotter's 8-Step Process, ADKAR, McKinsey 7S	LO3: Innovation & Digital Transformation	
18.	**Agile for Data Teams**	**Agile for Data Teams** Scrum, Kanban, DataOps	LO3: Innovation & Digital Transformation	
19.	**Measuring Innovation Impact**	**Measuring Innovation Impact** ROI, time-to-value, customer-centric metrics	LO3: Innovation & Digital Transformation	

20.	**Leadership Styles for Data Projects**	**Leadership Styles for Data Projects** Servant, transformational, situational leadership	LO4: Leadership in Data Teams	
21.	**Building High-Performance Data Teams**	**Building High-Performance Data Teams** Skills mapping, upskilling, hybrid teams	LO4: Leadership in Data Teams	
22.	**Conflict Resolution**	**Conflict Resolution** Technical vs. business stakeholder alignment	LO4: Leadership in Data Teams	
23.	Half-Term Exam	**Data Strategy Workshop** Develop a strategy for a mock organization		
24.	**Data Storytelling**	**Data Storytelling** Influencing decisions with dashboards, narratives	LO4: Leadership in Data Teams	
25.	**Personal Leadership Development**	**Personal Leadership Development** 360° feedback, mentorship, continuous learning	LO4: Leadership in Data Teams	
26.	**Regulatory Simulation**	**Regulatory Simulation** GDPR compliance audit role-play	LO5: Capstone & Real-World Application	
27.	**Innovation Pitch**	**Innovation Pitch** Present a data-driven innovation to "executives"	LO5: Capstone & Real-World Application	
28.	**Leadership Reflection**	**Leadership Reflection** Personal SWOT analysis, growth plan	LO5: Capstone & Real-World Application	
29.	Final Exam Preparation & Review	LO1, LO2, LO3, LO4	LO1, LO2, LO3, LO4	
30.	Final Exam		LO1, LO2, LO3, LO4	