Functional Area - Data Science

Title	Design customised data management tools and services to manage the target data for an organisation
Code	111142L6
Range	This Uoc involves designing and developing data management tools and services that are not available from the existing markets to manage the target data based on different requirements including capacity, performance, reliability, recoverability, discovery scheme, etc.
Level	6
Credit	6 （For Reference Only）
Competency	Performance Requirements 1. Understand the practices of data management throughout its lifetime through the internal (and external) data streams of an enterprise • know the data management being a comprehensive set of concepts, procedures, practices, processes, and a number of systems that allow for an organization to gain control of the data assets • know the data operations covered in data management (See Remark 1) • know the requirements of using different data management tools/services/platforms (See Remark 2) • know the differences among in-house, outsourced and hybrid development of data management tools/services/platforms 2. Design and develop the right data management tools/services/platforms to fill the gap between the data management requirements and the data management tools/services/platforms from existing markets • select the appropriate design and development tools/environments for building the targeted data management tools/services/platform • design and develop the right data management tools/services/platforms to fill the gap between the data management requirements and the outsourced data management tools/services/platforms from existing markets • test the developed data management tools/services/platforms 3. Evaluate the developed data management tools/services/platforms with the integration of existing ones based on the use of the data
Assessment Criteria	The integrated outcome requirement of this UoCs are the abilities to: • design and develop the right data management tools and services that are not available from the existing markets to perform the necessary data management processes to meet the data requirements for the organisation • evaluate the developed data management tools/services/platforms with the integration of existing ones based on the data objectives
Remark	1. Data management covers the following operations (but not limited to): • create, access, and update data across diverse data tiers • store data across clouds and on-premise • use data across applications, analytics, and algorithms • provide high-availability and disaster recovery • secure data and provide privacy • archive and destroy data based on retention rules and compliance requirements.

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	2. The requirements of using different data management tools and services include (but not limited to) capacity, performance, reliability, recoverability, discovery scheme, security, etc.