## Specification of Competency Standards for the Information & Communications Technology Industry Unit of Competency

## Functional Area - Data Science

Title	Perform the overall data management processes from the in-house, outsourced or hybrid tools/services/platforms using the identified tools.
Code	111143L6
Range	This UoC involves performing the overall data management processes (such as extraction, transformation, load, storage, disposal, etc.) using the identified tools to manage the data across diverse data tier and data retrieval processes in a growing variety of data usages.
Level	6
Credit	9 (For Reference Only)
Competency	Performance Requirements 1. Know the data management process
	<ul> <li>understand the different processes need to carry out the task</li> <li>assess and identify the best tools for each process</li> <li>understand the complexity of tools/services/platforms that are involved</li> <li>identify the data tier involved and potential problems that could arise</li> </ul>
	2. Perform the overall data management processes
	<ul> <li>create, access and update the data across a diverse data tier and data retrieval processes in a growing variety of apps, analytics, and algorithms</li> <li>manage the storage of data across multiple / distributed data stores (See Remark 1)</li> <li>perform the relevant tasks of archiving and destroying the data in accordance with retention schedules and compliance requirements</li> <li>manage the infrastructures and environments of performing the data management processes for both in-house and outsourced data management tools/services/platforms</li> <li>review the overall data management tools/services/platforms for the data management effectiveness and maturity</li> </ul>
	3. Exhibit professionalism
	<ul> <li>Be able to:         <ul> <li>apply industry best practices to perform the data management processes</li> <li>comply with the organisation's guidelines and procedures as well as any (local and international) laws and regulatory requirements, if applicable</li> </ul> </li> </ul>
Assessment Criteria	The integrated outcome requirement of this UoC are the abilities to:
	<ul> <li>perform the overall data management processes from the in-house, outsourced or hybrid tools/services/platforms to meet the requirements of effectiveness, maturity, compliances, etc. in a growing variety of data usages</li> <li>review the overall data management tools/services/platforms for the data management effectiveness and maturity</li> </ul>
Remark	1. Data storage platforms include (but not limited to) database server, data warehouse, data lake, etc.