

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

Functional Area - Data Science

Title	Manage and implement different data acquisition options for the identified internal or external sources
Code	111137L6
Range	This UoC involves managing and implementing the different data acquisition options for the identified data sources (both internal and external). The options include collecting new data, converting/transforming legacy data, sharing/exchanging data and purchasing data through subscription or data-as-a-service solution
Level	6
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Know of different data acquisition options</p> <ul style="list-style-type: none"> <li>• Have knowledge of the data description, various data acquisition and wrangling techniques (See Remark 1)</li> <li>• Appraise and manage various data acquisition options</li> </ul> <p>2. Manage and implement different data acquisition options</p> <ul style="list-style-type: none"> <li>• Acquire data from all the identified internal and external sources (both structured or unstructured data) using different techniques, such as ETL batch processing, streaming ingestion, scrapers, APIs and crawlers</li> <li>• Utilise various data wrangling techniques, such as parsing, and algorithms for complex and multi-source data</li> <li>• Aware of the privacy and ethical implications of sourcing internal and external data</li> </ul> <p>3. Exhibit professionalism</p> <ul style="list-style-type: none"> <li>• Be able to: <ul style="list-style-type: none"> <li>○ apply industry best practices to manage and implement different data acquisition options</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 is the ability to collect the appropriate and up-to-date data through various data acquisition and wrangling techniques to obtain the data being valid, accurately interpreted, and applicable to the desired contexts with respect to the identified data sources
Remark	1. Various data acquisition options (for first-party, second-party and third-party data) include (but not limited to) new data collection, legacy data transformation/conversion, data sharing/exchange, data subscription and/or data-as-a-service solution. This includes automated collection (e.g., of sensor-derived data), the manual recording of empirical observations, and obtaining existing data from other sources.