

**Information and Communications Technology Industry Training Advisory Committee
Software Products and Software Services (SW) branch
Unit of Competencies**

1. Title	Build a data architecture registry	
2. Code	ITSWAR609A	
3. Range	Apply and develop appropriate tools to capture and model data assets into data architecture artefacts and to perform lifecycle management of the artefacts in the data architecture registry [Architecture – Data Architecture]	
4. Level	6	
5. Credit	6	
6. Competency	<p>6.1 Understand various tools for data modelling and specification</p> <p>6.2 Evaluate and select appropriate tools to capture and model data assets into data architecture artefacts</p> <p>6.3 Apply and develop selected tools to capture and model data assets into data architecture artefacts</p> <p>6.4 Understand the life cycle of data architecture artefacts</p> <p>6.5 Evaluate and select appropriate tools to build a registry of data architecture artefacts to perform lifecycle management of the artefacts</p>	<p>Performance Requirement Be able to identify different tools used for</p> <ul style="list-style-type: none"> ▪ capturing data structures in existing data assets ▪ analysing existing data structures and data models ▪ developing data models from different viewpoints <p>(See Remark 1 for examples of required tools)</p> <p>Be able to</p> <ul style="list-style-type: none"> ▪ evaluate different tools based on the required viewpoints to address the stakeholders' needs and information requirements ▪ select appropriate tools to model data assets into data architecture artefacts <p>Be able to</p> <ul style="list-style-type: none"> ▪ apply selected tools and techniques to capture and model data assets into data architecture artefacts to satisfy stakeholders' needs and information requirements ▪ customize the existing tools or develop new tools if existing ones cannot address the needs, e.g. spreadsheet software, database scripts <p>Be able to</p> <ul style="list-style-type: none"> ▪ understand the life cycle of different data architecture artefacts, from creation to approval to upgrade to deprecation ▪ understand the roles and responsibilities of various parties in developing and using the artefacts throughout the life cycle <p>Be able to</p> <ul style="list-style-type: none"> ▪ evaluate different tools to perform life cycle management of data architecture artefacts based on the stakeholders' needs ▪ select appropriate tools to build a registry of data architecture artefacts

	<p>6.6 Apply and develop required tools to build a registry of data architecture artefacts for its lifecycle management</p> <p>Be able to</p> <ul style="list-style-type: none"> ▪ apply selected tools to build a registry of data architecture artefacts for performing lifecycle management of the artefacts to satisfy stakeholders' needs, e.g. version control software ▪ customise existing tools or develop new tools to build a registry of data architecture artefacts to perform lifecycle management of the artefacts to satisfy stakeholders' needs, e.g. build a website for the registry
7. Assessment Criteria	<p>The integrated outcome requirements of this UoCs are the abilities to:</p> <ul style="list-style-type: none"> (i) apply and develop required tools and techniques to capture and model data assets into data architecture artefacts; and (ii) apply and develop required tools and techniques to build a registry of data architecture artefacts for performing lifecycle management of the artefacts.
Remark	<p>1. Examples of required tools for developing data architecture artefacts are</p> <ul style="list-style-type: none"> a) data modelling tools such as UML modelling tools; b) spreadsheet software; and c) database administrative utilities such as those used to capture database schemas.