

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

1. Title	Manage technology architecture life cycle	
2. Code	ITSWAR616A	
3. Range	Manage technology architecture life cycle (can also be described as perform change management of the technology architecture) by analysis current as well as future needs of the organization and technology trend [Architecture – Technology Architecture]	
4. Level	6	
5. Credit	3	
6. Competency	<p>6.1 Be aware of new technology advancement</p> <p>6.2 Review the current technology architecture against new business requirements, changes in standards, technology, and methodology and revise as appropriate</p> <p>6.3 Build and maintain a library of technology architecture building blocks</p> <p>6.4 Perform trade-off analysis of newer technology / model against current technology in the architecture</p>	<p><u>Performance Requirement</u></p> <p>Be able to</p> <ul style="list-style-type: none"> ▪ understand new technology development and identify impacts to the current technology architecture ▪ understand the current technology architecture limitation and ongoing changes in business requirements so as to identify the potential use of new technology which could either enhance the current architecture and / or address new business requirements <p>See Remark 1 for examples of new technology impacts.</p> <p>Be able to</p> <ul style="list-style-type: none"> ▪ support appropriate re-use of building blocks that have been developed ▪ replace individual building blocks with those implemented by using new technology without impacting the entire technology architecture <p>Be able to</p> <ul style="list-style-type: none"> ▪ use appropriate models to perform the trade-off analysis, on possibly incomplete and inconsistent information, for the decision of technology changes or replacement in the technology architecture ▪ utilize technology architecture viewpoints to perform the trade-off analysis or illustrate differences in the various technology architecture options ▪ work out an optimal model that resolve all conflicts among various technology architecture options <p>(See Remark 2 for examples of technology architecture viewpoints)</p>

	6.5 Define technology architecture life cycle professionally	Be able to define and manage technology architecture life cycle according to evolving business requirements as well as organization's policies, procedures, standards and any applicable industry standards as appropriate
7. Assessment Criteria	<p>The integrated outcome requirements of this UoCs are the abilities to:</p> <ul style="list-style-type: none"> (i) perform life cycle management of the technology architecture for continuous improvement; and (ii) maintain the currency of the technology adopted. <p>It should be noted that any changes to the technology architecture should consider the current and future needs (which may involve incomplete and inconsistent information) as well as appropriate organization and industry standards.</p>	
Remark	<ul style="list-style-type: none"> 1. Examples of new technology impacts include, but are not limited to, <ul style="list-style-type: none"> a) financial impact: the availability of lower cost technology option; b) business impact: the availability of new technology which addresses a key business requirement; and c) technical impact: the availability of new technology which makes the current technology obsolete 2. Examples of technology architecture viewpoints include hardware, communication, processing, standards, cost, and integration. 	