

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

1. Title	Evaluate the quality of a software product (See Remark 1 for the meaning of “software product”.)
2. Code	ITSWQA402A
3. Range	Perform objective evaluation of the quality of a software product throughout the product development life cycle within the context of product level QA (See Remark 2 for the meaning of product development life cycle) [Quality Assurance – Product Level QA]
4. Level	4
5. Credit	2
6. Competency	<p style="text-align: center;"><u>Performance Requirement</u></p> <p>6.1 Know how to evaluate the quality of various software artefacts</p> <ul style="list-style-type: none"> ▪ understand the evaluation criteria for the quality of various software artefacts based on the defined software product QA plan ▪ understand the tools and techniques available to assist in the evaluation <p>See Remark 3 for examples of software artefacts in a software product</p> <p>6.2 Summarize product quality issues and lessons learned</p> <p>Be able to objectively summarize quality issues and lessons learnt of a software product throughout its entire product development period based on the defined software product QA plan</p> <p>See Remark 4 for examples of software project quality issues and lessons learned</p> <p>6.3 Conduct casual and trend analysis to drive quality process improvement</p> <p>Be able to</p> <ul style="list-style-type: none"> ▪ select and utilize suitable tools and techniques for the analysis ▪ conduct casual and trend analysis with the help of suitable tools and techniques to drive quality process improvement <p>See Remark 5 for examples of tools and techniques for the analysis</p> <p>6.4 Perform objective evaluation of a software product in a professional manner</p> <p>Be able to perform objective evaluation of a software product based on the defined software QA plan</p> <ul style="list-style-type: none"> ▪ in an efficient and effective manner ▪ in accordance with industry best practices, organization’s policies and guidelines as well as any (local and international) laws and regulatory requirements, where applicable ▪ with endorsement from stakeholders
7. Assessment Criteria	The integrated outcome requirements of this UoCs are the abilities to: (i) evaluate of the quality of a software product objectively; and (ii) provide adequate recommendations throughout the product development life cycle to drive quality process improvement based on the defined software QA plan.
Remark	<ol style="list-style-type: none"> 1. Within this UoCs, “software product” takes a boarder meaning of software project, software product, and software services. 2. Within this UoCs, “product development life cycle” may include various activities of software services as well as the life cycle of a software project. 3. Examples of software artefacts include, but are not limited to, program source and software documents such as software requirements specification and software design documents.

	<ol style="list-style-type: none"><li data-bbox="432 188 1418 315">4. Examples of software project quality issues and lesson learnt include, but are not limited to, the causes of activities leading to quality changes, types of quality changes, reasons for selecting specific corrective actions, and classification of quality change causes for further analysis.<li data-bbox="432 315 1418 409">5. Examples of tools and techniques for casual and trend analysis include, but are not limited to, Pareto analysis, cause/effect diagrams, and statistical sampling.
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