

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

Functional Area - Information Security

Title	Compare the strengths and weaknesses of different cryptographic algorithms and determine the suitable algorithm for the organization operation
Code	111183L5
Range	Identify the cryptographic algorithms that best suit the needs of the organization's operation
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Understand the needs and operation of the organization</p> <ul style="list-style-type: none"> • Identify the needs and use cases of cryptographic algorithm within the organization's structure • Identify the types, sizes and amount of information that need to be encrypted • Identify the level of security needed for the organization's use case <p>2. Aware of the different cryptographic algorithms and their strength and weakness</p> <ul style="list-style-type: none"> • Understand the different cryptographic algorithms available • Aware of the potential cost of adopting a particular algorithm (such as capital cost, training cost, staff training cost, etc...) • Understand the industry standards in cryptographic algorithms and how each of the cryptographic algorithms identified performed under these standards • Understand the complexity of each cryptographic algorithms under consideration • Aware of the difficulties that each cryptographic algorithms may inflict on the management and user-friendliness of the information • Identify the strength and weaknesses of different cryptographic algorithms <p>3. Suitability to the organization</p> <ul style="list-style-type: none"> • Assess each cryptographic algorithms in consideration against the requirements/needs of the organization • Consider the total cost incurred on the organization in the adaptation of an algorithm • Consider the management of the data, the difficulties and effectiveness of implementing each cryptographic algorithms into the organization's operation systems • Propose to the organization's management the cryptographic algorithm best suited the needs of the organization's operation
Assessment Criteria	<p>The integrated outcome requirements of this UoC are the abilities to :</p> <ul style="list-style-type: none"> • summarize the strengths and weaknesses of each cryptographic algorithms under consideration with respect to the organization's operational needs • propose the cryptographic algorithm that most suited the operational needs of the organization
Remark	