

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

Functional Area - Design, Development & Maintenance

Title	Perform system testing against user, technical and hosting requirements
Code	111160L4
Range	Identify all elements of the system that need to be tested against user and system requirements, including data that should be used to fully test the system.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Have the knowledge to design and develop test plans and software/sensor simulator to facilitate different levels of testing</p> <ul style="list-style-type: none"> <li>• Be able to: <ul style="list-style-type: none"> <li>○ identify the requirements of test plans</li> <li>○ identify the requirements of software/sensor simulator, if applicable</li> </ul> </li> </ul> <p>2. Perform various levels of testing, which may involve the use of a software/sensor simulator</p> <ul style="list-style-type: none"> <li>• Be able to: <ul style="list-style-type: none"> <li>○ design and develop software/sensor simulator, if applicable, to facilitate different levels of testing</li> <li>○ perform the required testing activities of various levels of testing according to the corresponding test plans</li> </ul> </li> </ul> <p>3. Perform all testing activities in a professional manner</p> <ul style="list-style-type: none"> <li>• Be able to <ul style="list-style-type: none"> <li>○ perform the testing activities of various levels of testing in an efficient and effective manner</li> <li>○ ensure that all such testing activities are complied with the corresponding test plans and are in accordance with the organisation's guidelines as well as any (local and international) laws and regulatory requirements, if applicable</li> </ul> </li> </ul>
Assessment Criteria	<p>The integrated outcome requirements of this UoC are the abilities to:</p> <ul style="list-style-type: none"> <li>• develop appropriate software/sensor simulators, if necessary, for testing purposes;</li> <li>• perform various levels of testing; and</li> <li>• document all testing activities in test reports.</li> </ul>
Remark	Various levels of testing include unit testing, integration testing, system testing – functional testing and performance testing, and user-acceptance testing.