



Unit title	Testing the Security of Information Systems 2
SQA code	H7CT 04
SCQF level	8
SCQF credit points	14
SSC ref	SECTEST2

History of changes

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Title	Testing the Security of Information Systems 2	
Learning Outcomes	Assessment Criteria	
The learner will:	The learner can:	
<p>1 Be able to plan security testing.</p>	<p>1.1 Develop a context driven test approach to systematically test specified parts of a system in order to assess their information security status.</p> <p>1.2 Analyse given information assurance requirements to produce information security test acceptance criteria.</p> <p>1.3 Develop test scripts and plans to ensure that all information assurance requirements are tested.</p> <p>1.4 Prioritise testing activity to target the most significant threats and vulnerabilities first.</p> <p>1.5 Select, and where necessary adapt, methods, tools and techniques to conduct penetration testing.</p> <p>1.6 Define all required test preparation and conclusion activities.</p>	
<p>2 Be able to carry out security testing.</p>	<p>2.1 Ensure that all required preparations are implemented, in line with test plans, prior to carrying out tests.</p> <p>2.2 Apply test methods, tools and techniques following organisational procedures.</p> <p>2.3 Record the results of tests using organisational documentation.</p> <p>2.4 Ensure that all required activities have been correctly implemented following the completion of testing in line with test plans.</p> <p>2.5 Critically evaluate the results of testing to accurately identify specific vulnerabilities.</p> <p>2.6 Prioritise identified vulnerabilities against information assurance requirements.</p>	

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
	<p>2.7 Determine and justify actions to mitigate identified vulnerabilities.</p> <p>2.8 Report the results of test activities following organisational procedures.</p> <p>2.9 Communicate the results and implications of test activities to relevant persons using media, format and structures which meet the needs of the intended audience.</p> <p>2.10 Evaluate organisational procedures for carrying out security testing.</p>

Additional information about the Unit
Unit purpose and aim(s)
Security testing determines the level of resilience of an information system to information security threats and vulnerabilities through planning and applying testing methods, including penetration testing, for assessing the robustness of an information system, against a coordinated attack.
Details of the relationship between the Unit and relevant national occupational standards (if appropriate)
This Unit is based on the e-skills UK NOS for Information Security.
Details of the relationship between the Unit and other standards or curricula (if appropriate)
N/A
Assessment requirements specified by a sector or regulatory body (if appropriate)
This Unit may be assessed using evidence derived from real work activities.

Assessment (evidence) Requirements

The Unit may be assessed using any appropriate methods, or combination of methods, which clearly demonstrate the learning outcomes.

Guidance on Instruments of Assessment

Learners must complete real work activities in order to produce evidence to demonstrate they are occupationally competent. An e-portfolio approach is encouraged.

Simulation is allowed for aspects of the Unit specified when:

- a learner is required to complete a work activity that does not occur on a regular basis and therefore opportunities to complete a particular work activity do not easily arise
- a learner is required to respond to a situation that rarely occurs, such as responding to an emergency situation
- the safety of a learner, other individuals and/or resources will be put at risk.

Simulation must replicate the workplace to such an extent that learners will be able to fully transfer their occupational competence to the workplace and real situations.