Functional Area: Network Infrastructure & Operation (Implementation)

1.	Title	Perform integration tests
2.	Code	ITCSNO316A
3.	Range	An essential part of network deployment is to ensure the implemented network can be integrated with other networks. This UoC concerns performing network integration testing with internal networks (intra-networks). Network in this context can be data and/or voice (VOIP), wireline or mobile network. Tests include physical network interfaces, transmissions, OSS compatibility and functionality tests like, authentication, billing, etc.
4.	Level	3
5.	Credit	3
6.	Competency	Performance Requirement 6.1 Possess the knowledge in the subject area • Experienced with formulating network test plans, performing tests and analysing results • Possess basic knowledge of various protocols and network technologies standard for wired-line and mobile network such as ATM, IP, GSM, LTE, NGN, MPLS, etc. • Comprehend test plans, network infrastructure diagrams and configuration settings • Capable of operating network testing tools and set up testing environments • Experienced with the features and functions of internal networks such as network access security, network event monitoring, mobile users logging, OSS functions, cost management, network administration, etc. • Possess knowledge of network deployment and network interconnectivities from layer 1 to layer 7 of the OSI reference model • Comprehend health and safety rules and hazards related to the equipment and/or tools being used during testing 6.2 Perform integration tests Be able to: • Read the test plans and comprehend the testing requirements • Setup the appropriate tools and environments for measuring or recording of the tests • Perform the test cases as per required by the test plans. More than one cycle may be required and interdepartmental coordination may be necessary for some tests, such as traffic linking, traffic routing, event triggering, etc • Analyse the test results to ensure the tests were satisfactorily completed • Document the testing details and package the test results to formulate a test report to relevant stakeholders (supervisors, network designers, etc.) 6.3 Exhibit professionalism • Perform all tests as required by the test plan and suggest improvements to supervisors or test designers • Adhere to safety standards and precautions while performing the tests
7.	Assessment Criteria	The integrated outcome requirements of this UoC are the abilities to: i. follow test plan requirements ii. prepare satisfactory test environments with test recording tools to record the completed tests for further analysis iii. work with colleagues, effectively, in the preparation and performing of the tests iv. complete the required tests and document the results with any special findings such as incompatibilities v. package the test report that conforms to the organisation's required standards and formats for submission to appropriate stakeholders
	Remark	