Functional Area: Network Infrastructure & Operation (Security)

1.	Title	Build or configure switching/routing devices to deliver data to correct endpoint or person
2.	Code	ITCSNO432A
3.	Range	In order to build a successful network a number of important ingredients are needed to be considered. They are: performance, reliability, and security. But this ingredient would be irrelevant if the data is not delivered to the correct destination. This UoC describes the competencies for building or configuring switching/routing devices to the correct endpoint. In the context of secure delivery VPN and IPSec would be considered. The network could be wired or wireless.
4.	Level	4
5.	Credit	4
6.	Competency	<table><tr><td colspan="2">Performance Requirement</td></tr><tr><td>6.1 Possess the knowledge in the subject area</td><td> - Possess extensive knowledge in data communication concepts and how data is transmitted on cables or wireless devices - Possess experience with routing and switching protocols like RIP, OSPF, BGP, EGP, etc - Experienced with installing and configuring routing and switching devices with reprogram/change routing tables, set routing policies, set VPN tunnelling, etc. - Possess extensive knowledge in the security feature of routers and switches, such as VLAN (IEEE 802.1Q), IPSec, VPN, etc - Comprehend network plans - Possess extensive knowledge of current network protocols like IP, TCP, etc - In tune with current and coming wired/wireless network technologies or applications like VOIP, WiMax, 3G, 4G, LTE, broadband Ethernet, etc - Able to seek and comprehend vendor product technical manuals </td></tr><tr><td>6.2 Build or configure switching/routing devices to deliver data to correct endpoint or person</td><td>Be able to: - Work with colleagues to identify the required method of connections between endpoints, such as normal point to point, VPN (secure or trusted) - Determine endpoint connection information such as destination network details, endpoint address or name, etc - Determine the security policies associated with the endpoints - Build and/or configure the devices with required tunnels by setting up routers to conform with the organisation's security policies for handling traffics between the endpoints - Use appropriate testing tools to test and validate the network setup to ensure data is transfer correctly and securely between endpoints - Document the setup details and package the test results for filing and signoff - Complete the necessary internal administration procedures to indicate completion of work </td></tr><tr><td>6.3 Exhibit professionalism</td><td> - Follow safety procedures at every step of configuration of network devices when building the secure endpoint connections </td></tr></table>

7. Assessment Criteria	The integrated outcome requirements of this UoC are the abilities to:
	i. read job orders or following supervisor's instructions to comprehend the endpoint connection set up requirements
	ii. build or configure the connections into switching/routing devices
	iii. ensure the connection of the endpoints are correctly configured by using appropriate tools to verify the connection
	iv. document the installation work that conforms to the organisation standards and policies, and seek work completion signoff from stakeholders
Remark	