Functional Area - Information Security

Title	Design and conduct a cyberattack simulation to evaluate the effectiveness of cyber defences across different technology layers
Code	111184L5
Range	Create and carry out a cyberattack simulation on the organization's assets and network to assess the effectiveness of the cyber security
Level	5
Credit	6 （For Reference Only）
Competency	Performance Requirements 1. Understand the range of assets that are prone to cyberattack • Identify assets and infrastructures that are prone to cyberattack • Understand the uses and needs of the identified assets and infrastructures in terms of the organization's operation • Identify the range of personnel that have access to the data stored on the assets or infrastructures and understands the way that they access these materials 2. Stay updated with the latest trend • Stay updated on the new ways and methods cyberattack could be conducted • Understand and stay up to date with the industry standards • Aware of the popular and common ways of cyberattack 3. Identify weaknesses in the system • Understand the cybersecurity policy and procedures of the organization • Identify potential weaknesses and vulnerabilities in the system and operational procedures 4. Design and conduct the cyberattack simulation • Design the simulation by targeting especially the identified weaknesses and vulnerabilities • Simulation should account for the use of the latest technologies and techniques • Simulation exercise should minimise the impact on the normal operation of the organization 5. Evaluation of the effectiveness of the cyber defences • Analyse the simulation result to highlight any deficiencies • Assess the performance of the cyber defences by benchmarking to industry standards • Make suggestions for enhancement of the cyber defence system 6. Design and conduct the cyberattack simulation professionally • Ensure the assessment conducted is abided to professional standards
Assessment Criteria	The integrated outcome requirements of this UoC are the abilities to： • design and conduct a cyberattack simulation • assess the performance of the cyber defence system by benchmarking to industry standards

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	• summarize any deficiencies in the cyber defence system and suggest system enhancements
Remark	