

AAQ: Cyber Security & Networks

Studied during Year 12	Studied during Year 13
<p>F193: Fundamentals of Cyber Security Mandatory unit, assessed by an examination</p> <p>In this unit you will learn why cyber security is important and the motivations of different threat actors. You will learn what cyber security threats look like, how threats function and the steps that can be taken by individuals and organisations to protect, detect and respond to them. Topics include:</p> <p>Topic Area 1 The cyber security landscape Topic Area 2 Cyber security vulnerabilities Topic Area 3 Impact of cyber security events Topic Area 4 Cyber security mitigations Topic Area 5 Policies, procedures, and event handling Topic Area 6 Job roles and responsibilities</p> <p>F194: Fundamentals of Networks Mandatory unit, assessed by examination</p> <p>In this unit you will learn about the fundamental concepts of networks, including different models, addressing techniques and protocols. You will also learn about the different hardware devices that are used in a network and how those devices are connected. Topics include:</p> <p>Topic Area 1 Network types, models, topologies and services Topic Area 2 Network layers, protocols and addressing Topic Area 3 Wired network components Topic Area 4 Mobile and wireless networks Topic Area 5 Network Performance Topic Area 6 Cloud networks</p> <p>F195: Preventing Cyberattacks Mandatory unit, assessed by an assignment</p> <p>In this unit you will learn techniques to assess for risks to networks, devices and applications and produce risk assessments. You will learn how to audit the measures used to prevent cyberattacks, design policies that control access to systems and educate users in cyberattack prevention. Topics include:</p> <p>Topic Area 1 Cyber security aims and threats Topic Area 2 Identify risks to digital networks and data Topic Area 3 Audit and improve cyberattack prevention measures Topic Area 4 Design access control policies Topic Area 5 Design written user policies Topic Area 6 Review designed cyberattack prevention measures</p>	<p>F196: Digital Forensic Investigation Optional unit, assessed by an assignment</p> <p>In this unit you will learn about digital forensics including the processes followed when completing digital forensic investigations. You will plan digital forensic investigations and use software tools to extract evidence and present evidence ready for use in court. Topics include</p> <p>Topic Area 1 Fundamentals of digital forensics Topic Area 2 Plan digital forensic investigations Topic Area 3 Collect, preserve and analyse digital evidence Topic Area 4 Report digital forensic investigation findings Topic Area 5 Review digital forensic investigations</p> <p>F197: Penetration Testing & Incident Response Optional unit, assessed by an assignment</p> <p>In this unit you will learn about penetration testing strategies and plan penetration tests. You will learn how to undertake planned exploits on vulnerable systems, using specific methods and tools. You will create cyber security incident response plans, incident playbooks and maintenance plans to build and upkeep incident response capability. Topics include:</p> <p>Topic Area 1 Introduction to penetration testing Topic Area 2 Plan penetration testing Topic Area 3 Implement penetration testing scoping plans Topic Area 4 Incident response planning Topic Area 5 Develop cyber security incident response capability Topic Area 6 Review penetration testing and incident response capability</p> <p>F198: Implementing Secure Local Area Networks (LANs) Optional unit, assessed by an assignment</p> <p>In this unit you will learn the purpose and components of local area networks (LANs). You will then plan, design, implement, secure and test local networks that meet client and user requirements. Topics include:</p> <p>Topic Area 1 Purpose and components of local area networks (LANs) Topic Area 2 Design secure local area networks (LANs) Topic Area 3 Implement and secure local area networks (LANs) Topic Area 4 Test local area networks (LANs) Topic Area 5 Review and maintain local area network (LAN) performance and security</p> <p>Two of these 3 optional units will be studied.</p>