

**NCFE Level 2 Certificate in Principles of Cyber Security (603/5853/1)**

**Statement of authenticity**

Learner name:

Centre number:

Centre name:

**Signatures**

Learner: Date:

Tutor/Assessor: Date:

Internal Quality Assurer (IQA)\*: Date:

External Quality Assurer (EQA)\*: Date:

\* For completion if part, or all, of the evidence has been sampled by the Internal and/or External Quality Assurer

**Unit 01 Introduction to cyber security (L/618/1181)**

**Learning outcome 1**

**You will:** Understand motivations for cyber crime

You must:

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| **1.1 Describe the term** ‘**cyber crime’** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
|  |  |
| **IQA/EQA feedback** | |

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| **1.2 Explain the possible motives for cyber crime** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **1.3** **Identify potential threat actors** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 01 Introduction to cyber security (L/618/1181)**

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| **1.4 Define the terms ‘external threat’ and ‘insider threat’** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **1.5 Explain the possible motivations that could lead to external and insider threats** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **1.6 Explain what is meant by ‘targeted’ and ‘untargeted’ attacks** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 01 Introduction to cyber security (L/618/1181)**

**Learning outcome 2**

**You will:** Understand the need for cyber security

You must:

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| **2.1 List common cyber crime vulnerabilities of:**   * **an individual** * **a business** * **a nation** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **2.2 Describe the potential impact of cyber crime on:**   * **an individual** * **a business** * **a nation** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 01 Introduction to cyber security (L/618/1181)**

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| **2.3 Explain the importance of cyber security for:**   * **an individual** * **a business** * **a nation** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **2.4 Explain why cyber security issues should be reported promptly** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 01 Introduction to cyber security (L/618/1181)**

**Learning outcome 3**

**You will:** Know about job roles within cyber security

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| **3.1 Describe the role of key organisations in the cyber security industry** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **3.2 Identify general job functions carried out by cyber security professionals** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **3.3 Define the term ‘hacking’** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 01 Introduction to cyber security (L/618/1181)**

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| **3.4 Explain the differences between the following types of hacker:**   * **white-hat** * **black-hat** * **grey-hat** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **3.5 Identify the key skills requirements of a cyber security professional** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 02 Understand terminology used in cyber security (R/618/1182)**

**Learning outcome 1**

**You will:** Understand cyber security terminology

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| **1.1 Define what is meant by the following in relation to cyber security:**   * **hardware** * **software** * **data management** * **networking** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **1.2 Describe the differences between LAN and WAN** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 02 Understand terminology used in cyber security (R/618/1182)**

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| **1.3 Explain the following terms in relation to cyber security:**   * **vulnerability** * **threat** * **risk** * **attack** * **protection** * **recovery** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **1.4 Describe organisational strategies in relation to cyber security** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 02 Understand terminology used in cyber security (R/618/1182)**

**Learning outcome 2**

**You will:** Understand current and emerging challenges in cyber security

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| **2.1** **Give examples of current and emerging challenges in cyber security** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 02 Understand terminology used in cyber security (R/618/1182)**

**Learning outcome 3**

**You will:** Understand what is meant by social engineering

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| **3.1 Define the term ‘social engineering’** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **3.2 Explain the benefits of using social engineering to a cyber criminal** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **3.3 Describe what is meant by ‘open source information’** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 02 Understand terminology used in cyber security (R/618/1182)**

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| **3.4 Identify information a cyber criminal could obtain through open sources** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **3.5 Describe techniques that could be used as part of social engineering** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **3.6 Identify useful information a cyber criminal could gain through social engineering** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 03 Understand legal and ethical aspects of cyber security (Y/618/1183)**

**Learning outcome 1**

**You will:** Understand key legislation related to cyber security

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| **1.1 Summarise key points of current legislation related to cyber security to protect:**   * **an individual** * **a business**   **a nation** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 03 Understand legal and ethical aspects of cyber security (Y/618/1183)**

**Learning outcome 2**

**You will:** Understand procedures to maintain data confidentiality and security

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| **2.1 Describe ways to protect stored data** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **2.2 Explain basic techniques for encrypting information** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **2.3 Describe the advantages and disadvantages of each encryption technique** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 03 Understand legal and ethical aspects of cyber security (Y/618/1183)**

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| **2.4 Define what is meant by the following:**   * **data in transit** * **data at rest** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **2.5 Explain the security checks an organisation might undertake before releasing information** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 03 Understand legal and ethical aspects of cyber security (Y/618/1183)**

**Learning outcome 3**

**You will:** Understand ethical conduct in cyber security

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| **3.1 Describe ethical conduct within cyber security** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **3.2 Describe unethical conduct within cyber security** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 04 Understand common threats to cyber security (D/618/1184)**

**Learning outcome 1**

**You will:** Know about common and emerging threats to cyber security

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| **1.1 Describe common and emerging threats to cyber security** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 04 Understand common threats to cyber security (D/618/1184)**

**Learning outcome 2**

**You will:** Understand what is meant by malicious software

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| **2.1 Explain what is meant by malicious software** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **2.2 Identify ways in which malicious software can infect a system** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **2.3 Identify methods for removing malicious software from an infected system** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 04 Understand common threats to cyber security (D/618/1184)**

**Learning outcome 3**

**You will:** Understand physical threats to cyber security

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| **3.1 Explain why perimeter access control is important** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **3.2 Give examples of when check and challenge on the premises may be needed** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 04 Understand common threats to cyber security (D/618/1184)**

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| **3.3 Identify the possible threats to a business presented by the use of:**   * **personal devices** * **removable devices** * **hardware** * **networking infrastructure** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **3.4 Give examples of possible threats presented by remote working** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **3.5 Describe best practice which can help to minimise physical threats to cyber security** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 05 Understand methods of maintaining cyber security (H/618/1185)**

**Learning outcome 1**

**You will:** Understand preventative methods used to maintain cyber security

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| **1.1 Describe routine methods to maintain cyber security** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **1.2 Explain what is meant by vulnerability testing** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **1.3 Explain what is meant by penetration testing** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 05 Understand methods of maintaining cyber security (H/618/1185)**

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| **1.4 Explain what is meant by security updates** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **1.5 Explain the term ‘patching’ in relation to cyber security** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **1.6 Explain why cyber security information and maintenance records should be accurate and up-to-date** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 05 Understand methods of maintaining cyber security (H/618/1185)**

**Learning outcome 2**

**You will:** Understand the principles of user access control

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| **2.1 Define what is meant by user access control** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **2.2 Identify methods of restricting user access** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **2.3 Explain how to create a user access control system** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 05 Understand methods of maintaining cyber security (H/618/1185)**

**Learning outcome 3**

**You will:** Understand the use of firewalls

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| **3.1 Define the term ‘firewall’** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **3.2 Describe the key functions of a firewall** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 05 Understand methods of maintaining cyber security (H/618/1185)**

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| **3.3 Define what is meant by network traffic** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **3.4 Explain the advantages and disadvantages of using a firewall to protect from threats** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 06 Working with others in cyber security (K/618/1186)**

**Learning outcome 1**

**You will:** Understand team working for cyber security

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| **1.1 Describe what is meant by team dynamics** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **1.2 Compare the benefits of working with others to working alone** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **1.3 Describe ways in which team members can work together to make use of individual strengths** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 06 Working with others in cyber security (K/618/1186)**

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| **1.4 Identify ways to resolve conflict within a team** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **1.5 Explain how reviewing work activities can support effective teamwork** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 06 Working with others in cyber security (K/618/1186)**

**Learning outcome 2**

**You will:** Understand the use of interpersonal skills for working in cyber security

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| **2.1 Identify a range of interpersonal skills used when working in cyber security** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **2.2 Give examples of when different interpersonal skills might be used when working in cyber security** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **2.3 Describe how working with others within an organisation can support cyber security** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 06 Working with others in cyber security (K/618/1186)**

**Learning outcome 3**

**You will:** Understand the use of interpersonal skills for working in cyber security

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| **3 1 Explain the purpose of written communications used in cyber security** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **3.2 Identify the potential audience for the written communications used** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

**Unit 06 Working with others in cyber security (K/618/1186)**

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| **3.3 Identify the type of information that may be included in a written communication** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |

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| **3.4 Give examples of the elements that support effective written communication** | |
| **What have you done to show this?** | Location of evidence (eg hyperlink/portfolio page number) |
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| **IQA/EQA feedback** | |