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# Awarding body information Awarding body information

What is the name of the awarding body? Staffordshire University

Is the awarding body a higher education provider? Yes

Is the awarding body on the Office for Students register? Yes

# Qualification information Qualification information

You can only submit one qualification for each form. If you are submitting multiple qualifications you must start a new form for each qualification. Please include the name of the qualification as it appears on Ofqual register or UCAS. Include the size of the qualification. e.g. award, certificate, diploma

#### What is the name of the qualification?

Foundation Degree of Science (FdSc) in Computer Science (Technical)

# Is the qualification on the Ofqual register?

If the qualification is not regulated by Ofqual, the organisation owning the qualification must be OfS regulated. This is typically the case of qualifications from Higher Education Providers. For organisations which are Ofqual regulated, the specific qualification must be on the Ofqual register for the application to be progressed. The form will not prevent continuing if this is not completed, but your application cannot be progressed by the approval managers following submission if the awarding organisation is regulated by Ofqual but the qualification is not.

What is the level of the qualification? Level 5

# Route and occupational standards

# Route and occupational standards

Awarding bodies must demonstrate that a qualification will enable a person to demonstrate that they have attained as many of the knowledge, skills and behaviours set out in the standard as may be reasonably expected by undertaking a course of education.

#### Please note:

 Qualifications will only be considered for approval against occupational standards approved by the Institute.

If qualifications have optional units or pathways, we will only approve qualifications where every possible combination of units/ pathways ensures that a learner achieves competence in at least one occupation for which there is a standard. Qualifications with optional units that do not ensure this should be redesigned or remove optional units that do not align to occupations.

Awarding bodies must fill out all sections of this form. They must also submit supporting documentation to provide evidence of the following:

- The content of the qualification (for example, the specification of content)
- Evidence of employer engagement in the development and validation of the qualification (for example this could be within the qualification design and validation documentation that was used through the development of the qualification which evidences where and how employers were involved)

# Which route does the qualification fall under? Digital

Digital

#### Which occupational standards are aligned to the qualification?

Cyber-secruity technologist/Level: 4

Data analyst/Level: 4 Business analyst/Level: 4 Network engineer/Level: 4 Software developer/Level: 4 Software tester/Level: 4

Digital accessibility specialist/Level: 4

# **Attach documents**

#### Please attach the following documents:

- The content of the qualification (for example, the specification of content)
- Evidence of employer engagement in the development and validation of the qualification (for example this could be within the qualification design and validation documentation that was used through the development of the qualification which evidences where and how employers were

involved)

# Cyber-security technologist

# **Cyber-security technologist**

# Knowledge, skills and behaviours coverage within the qualification

Please identify which knowledge, skill and behaviour statements from the occupational standard are covered within the qualification.

Where knowledge, skill and behaviour statements are covered, please provide a reference to the qualification content. This should be a unit or module reference along with associated page/paragraph/line numbers (as appropriate) in the attached specification. Please be as specific as possible which content in the qualification aligns to the statement in the standard.

Where knowledge, skill or behaviour statements are partially covered or not covered, you will be asked to provide a rationale for the exclusion of this content from the qualification. The employer engagement evidence provided should support this rationale.

The following questions assess how knowledge, skill and behaviour statements from the occupational standards are covered within the qualification.

This page has automatically generated an item for each knowledge, skill and behaviour statement (KSB) contained within the chosen standard. So please do not remove or add any further KSBs, as it requires the exact number.

# **KSBgenerator**

# KSB<sub>1</sub>

K1 Principles of networks: OSI and TCP/IP models, data, protocols and how they relate to each other; the main routing protocols; the main factors affecting network performance including typical failure modes in protocols and approaches to error control; virtual networking.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# KSB 2

K2 The concepts, main functions and features of at least three Operating Systems (OS) and their security functions and associated security features.

#### Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors) & Digital Forensics (p35 L5 Module Descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# KSB 3

K3 Cyber security concepts and why cyber security matters to business and society; Security assurance concepts and how assurance may be achieved in practice including penetration testing and extrinsic assurance methods.

#### Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors), Digital Forensics (p35 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# KSB 4

K4 The main types of common attack techniques; also the role of human behaviour, including the significance of the 'insider threat'. Including: - how attack techniques combine with motive and opportunity to become a threat. - techniques and strategies to defend against attack techniques and mitigate hazards.

Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# KSB 5

K5 The significance of identified trends in cyber security threats and understand the value and risk of this analysis. How to deal with emerging attack techniques (including 'zero day'), hazards and vulnerabilities relevant to the digital systems and business environment.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### KSB 6

K6 Lifecycle and service management practices to an established standard to a foundation level for example Information Technology Infrastructure Library (ITIL) foundation level.

#### Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Digital Forensics (p35 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### KSB 7

K7 Cyber incident response processes, incident management processes and evidence collection/preservation requirements to support incident investigation.

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors), Digital Forensics (p35 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### KSB 8

K8 Understands the main features, applicability and how to apply the significant law, regulations and standards relevant specifically to cyber security. To include: laws, regulations & standards

relating to personal data and privacy (e.g. Data Protection Act 2018 implementing General Data Protection Regulation); use of digital systems (e.g. Computer Misuse Act 1990); regulatory standards for cyber security, intelligence collection and law enforcement (e.g. Intelligence Services Act 1994, Regulation of Investigatory Powers Act 2000; standards for good practice in cyber security (e.g. ISO 27001, CyberEssentials, NIST) and any updates or additions.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Cyber Operations (p26 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### KSB 9

K9 Ethical principles and codes good practice of at least one significant cyber security professional body and the ethical responsibilities of a cyber security professional.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Cyber Operations (p26 L5 Module descriptors), Digital Forensics (p35 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 10**

K10 How to analyse employer or customer requirements to derive security objectives and taking account of the threats and overall context develop a security case which sets out the proposed security measures in the context with reasoned justification.

Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 11**

K11 Horizon scanning including use of recognised sources of threat intelligence and vulnerabilities.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations

(p26 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 12**

K12 Common security architectures and methodologies; be aware of reputable security architectures that incorporates hardware and software components, and sources of architecture patterns and guidance. How cyber security technology components are typically deployed in digital systems to provide security functionality including: hardware and software to implement security controls.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Ethical Hacking (p40 L5 Module descriptors), Virtualization and Network Security (p85 L5 Module descriptors)

See Also 'as above'

# **KSB 13**

K13 The basic terminology and concepts of cryptography; common cryptography techniques in use; the importance of effective key management and the main techniques used; legal, regulatory and export issues specific to use of cryptography.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors), Virtualization and Network Security (p85 L5 Module descriptors)

See Also as above

#### **KSB 14**

K14 Risk assessment and audit methodologies and approaches to risk treatment; approaches to identifying the vulnerabilities in organisations and security management systems; the threat intelligence lifecycle; the role of the risk owner in contrast with other stakeholders.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Cyber Operations (p26 L5 Module descriptors), Digital Forensics (p35 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

K15 Principles of security management systems, including governance, organisational structure, roles, policies, standards, guidelines and how these all work together to deliver the identified security outcomes.

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Cyber Operations (p26 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors), Digital Forensics (p35 L5 Module descriptors), Virtualization and Network Security (p85 L5 Module descriptors)

See Also as above

# **KSB 16**

K16 Function and features of significant digital system components; typical architectures; common vulnerabilities in digital systems; principles and common practice in digital system security.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 17**

K17 Programming or scripting languages.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 18**

S1 Discover vulnerabilities in a system by using a mix of research and practical exploration).

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors), Virtualization and Network Security (p85 L5 Module descriptors)

S2 Analyse and evaluate security threats and hazards to a system or service or processes. Use relevant external source of threat intelligence or advice (e.g. National Cyber Security Centre) Combine different sources to create an enriched view of cyber threats and hazards.

#### Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Cyber Operations (p26 L5 Module descriptors), Virtualization and Network Security (p85 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 20**

S3 Research and investigate common attack techniques and relate these to normal and observed digital system behaviour and recommend how to defend against them. Interpret and demonstrate use of external source of vulnerabilities (e.g. OWASP, intelligence sharing initiatives, open source).

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 21**

S4 Undertake security risk assessments for simple systems without direct supervision and propose basic remediation advice in the context of the employer.

#### Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 22**

S5 Source and analyse security cases and describe what threats, vulnerability or risks are mitigated and identify any residual areas of concern.

Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Cyber Operations (p26 L5 Module descriptors), Digital Forensics (p35 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 23**

S6 Analyse employer or customer requirements to derive security objectives and taking account of the threats and overall context develop a security case which sets out the proposed security measures in the context with reasoned justification.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Cyber Operations (p26 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 24**

S7 Identify and follow organisational policies and standards for information and cyber security and operate according to service level agreements or other defined performance targets.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Cyber Operations (p26 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 25**

S8 Configure, deploy and use computer, digital network and cyber security technology.

#### Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors), Virtualization and Network Security (p85 L5 Module descriptors)

See Also as above

#### **KSB 26**

S9 Recommend improvements to the cyber security posture of an employer or customer based on research into future potential cyber threats and considering threat trends.

Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Cyber Operations (p26 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 27**

S10 Design, build, test and troubleshoot a network incorporating more than one subnet with static and dynamic routes, to a given design requirement without supervision. Provide evidence that the system meets the design requirement.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors), Virtualization and Network Security (p85 L5 Module descriptors)

See Also as above

# **KSB 28**

S11 Analyse security requirements (functional and non-functional security requirements that may be presented in a security case) against other design requirements (e.g. usability, cost, size, weight, power, heat, supportability etc.), given for a given system or product. Identify conflicting requirements and propose, with reasoning, resolution through appropriate trade-offs.

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Cyber Operations (p26 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors), Virtualization and Network Security (p85 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 29**

S12 Design and build, systems in accordance with a security case within broad but generally well-defined parameters. This should include selection and configuration of typical security hardware and software components. Provide evidence that the system has properly implemented the security controls required by the security case.

#### Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors), Virtualization and Network Security (p85 L5 Module descriptors)

See Also as above

S13 Write program code or scripts to meet a given design requirement in accordance with employers' coding standards.

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 31**

S14 Design systems employing encryption to meet defined security objectives. Develop and implement a plan for managing the associated encryption keys for the given scenario or system.

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Cyber Operations (p26 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 32**

S15 Use tools, techniques and processes to actively prevent breaches to digital system security.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 33**

S16 Conduct cyber-risk assessments against an externally (market) recognised cyber security standard using a recognised risk assessment methodology.

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

S17 Identify cyber security threats relevant to a defined context.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 35**

S18 Develop information security policies or processes to address a set of identified risks, for example from security audit recommendations.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 36**

S19 Develop information security policies within a defined scope to take account of legislation and regulation relevant to cyber security.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 37**

S20 Take an active part in a security audits against recognised cyber security standards, undertake gap analysis and make recommendations for remediation.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors)

S21 Develop plans for incident response for approval within defined governance arrangements for incident response.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES; Cyber Operations (p26 L5 Module descriptors), Digital Forensics (p35 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 39**

S22 Develop plans for local business continuity for approval within defined governance arrangements for business continuity.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Cyber Operations (p26 L5 Module descriptors), Digital Forensics (p35 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 40**

S23 Assess security culture using a recognised approach.

#### Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 41**

S24 Design and implement a simple 'security awareness' campaign to address a specific aspect of a security culture.

#### Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 42**

S25 Integrate and correlate information from various sources (including log files from different sources, digital system monitoring tools, Secure Information and Event Management (SIEM) tools, access control systems, physical security systems) and compare to known threat and vulnerability data to form a judgement based on evidence with reasoning that the anomaly represents a digital system security breach.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Cyber Operations (p26 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 43**

S26 Recognise anomalies in observed digital system data structures (including by inspection of network packet data structures) and digital system behaviours (including by inspection of protocol behaviours) and by inspection of log files and by investigation of alerts raised by automated tools including SIEM tools.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES; Cyber Operations (p26 L5 Module descriptors), Digital Forensics (p35 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 44**

S27 Accurately, objectively and concisely record and report the appropriate cyber security information, including in written reports within a structure or template provided.

Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 45**

S28 Configure digital system monitoring and analysis tools (e.g. SIEM tools), taking account of threat & vulnerability intelligence, indicators of compromise.

#### Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 46**

S29 Undertake root cause analysis of events and make recommendations to reduce false positives and false negatives.

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 47**

S30 Manage local response to non-major incidents in accordance with a defined procedure.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 48**

B1 Logical - Applies logical thinking, for example, uses clear and valid reasoning when making decisions related to undertaking the work instructions.

#### Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors), Digital Forensics (p35 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors), Virtualization and Network Security

#### **KSB 49**

B2 Analytical - working with data effectively to see patterns, trends and draw meaningful conclusions.

Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors), Digital Forensics (p35 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors), Virtualization and Network Security

# **KSB 50**

B3 Works independently and takes responsibility. For example, works diligently regardless of how much they are being supervised, and stays motivated and committed when facing challenges.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors), Digital Forensics (p35 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors)

See Also as above

# **KSB 51**

B4 Shows initiative, being resourceful when faced with a problem and taking responsibility for solving problems within their own remit.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors), Digital Forensics (p35 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors), Virtualization and Network Security

#### **KSB 52**

B5 Thorough & organised. For example uses their time effectively to complete work to schedule and takes responsibility for managing their own work load and time.

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors), Digital Forensics (p35 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors), Virtualization and Network Security

#### **KSB 53**

B6 Works effectively with a wide range of people in different roles, internally and externally, with a regard to inclusion & diversity policy.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Digital Forensics (p35 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 54**

B7 Communicates effectively in a wide variety of situations for example contributing effectively to meetings and presenting complex information to technical and non-technical audiences.

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Digital Forensics (p35 L5 Module descriptors), Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 55**

B8 Maintains a productive, professional and secure working environment.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cyber Operations (p26 L5 Module descriptors), Digital Forensics (p35 L5 Module descriptors), Virtualization and Network Security

See Also as above

# **KSB 56**

B9 Creative - taking a variety of perspectives, taking account of unpredictable adversary and threat behaviours and approaches, bring novel and unexpected solutions to address cyber security challenges.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Ethical Hacking (p40 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

B10 Problem Solving - Identifies issues quickly, solves complex problems and applies appropriate solutions. Dedicated to finding the true root cause of any problem and find solutions that prevent recurrence.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Cyber Operations (p26 L5 Module descriptors), Digital Forensics (p35 L5 Module descriptors), Virtualization and Network Security

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **Data analyst**

# **Data analyst**

# Knowledge, skills and behaviours coverage within the qualification

Please identify which knowledge, skill and behaviour statements from the occupational standard are covered within the qualification.

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The following questions assess how knowledge, skill and behaviour statements from the occupational standards are covered within the qualification.

This page has automatically generated an item for each knowledge, skill and behaviour statement (KSB) contained within the chosen standard. So please do not remove or add any further KSBs, as it requires the exact number.

# **KSBgenerator**

# **KSB**

# KSB 1

K1 Current relevant legislation and its application to the safe use of data.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 MD's), Computer Architecture, Networks and Cyber (p11 L4 MD's), Al and Data Mining (p9 L5 MD's) Business Intelligence and Visualisation (p18 L5 MD's), Professional Practice (p63 L5 MD's)

See Also Map

# KSB<sub>2</sub>

K2 Organisational data and information security standards, policies and procedures relevant to data management activities.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 MD's), Computer Architecture, Networks and Cyber (p11 L4 MD's), Business Intelligence and Visualisation (p18 L5 MD's), Professional Practice (p63 L5 MD's)

See Also Map

#### KSB 3

K3 Principles of the data life cycle and the steps involved in carrying out routine data analysis tasks.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 Module Descriptors), Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### KSB 4

K4 Principles of data, including open and public data, administrative data, and research data.

#### Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 Module Descriptors), Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Al and Data Mining (p9 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occ. St. Map

#### KSB 5

K5 The differences between structured and unstructured data.

#### Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 Module Descriptors), Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Al and Data Mining (p9 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occ. St. Map

#### KSB 6

K6 The fundamentals of data structures, database system design, implementation and maintenance.

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 Module Descriptors), Al and Data Mining (p9 L5 Module descriptors), Professional Practice (p63 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# KSB 7

K7 Principles of user experience and domain context for data analytics.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Al and Data Mining (p9 L5 Module descriptors), Business Intelligence and Visualisation (p18 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Map

#### KSB 8

K8 Quality risks inherent in data and how to mitigate/resolve these.

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Al and Data Mining (p9 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# KSB 9

K9 Principal approaches to defining customer requirements for data analysis.

#### Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Al and Data Mining (p9 L5 Module descriptors), Data Warehousing (p31 L5 Module

descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 10**

K10 Approaches to combining data from different sources.

#### Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Al and Data Mining (p9 L5 Module descriptors), Data Warehousing (p31 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 11**

K11 Approaches to organisational tools and methods for data analysis.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Al and Data Mining (p9 L5 Module descriptors), Data Warehousing (p31 L5 Module descriptors), Professional Practice (p63 L5 Module descriptors)

See Also Map

#### **KSB 12**

K12 Organisational data architecture.

#### Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Al and Data Mining (p9 L5 Module descriptors), Data Warehousing (p31 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 13**

K13 Principles of statistics for analysing datasets.

#### Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Al and Data Mining (p9 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 14**

K14 The principles of descriptive, predictive and prescriptive analytics.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Al and Data Mining (p9 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 15**

K15 The ethical aspects associated with the use of and collation of data.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Al and Data Mining (p9 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 16**

S1 Use data systems securely to meet requirements and in line with organisational procedures and legislation, including principles of Privacy by Design.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Al and Data Mining (p9 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 17**

S2 Implement the stages of the data analysis lifecycle.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Business Intelligence and Visualisation (p18 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

S3 Apply principles of data classification within data analysis activity.

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Al and Data Mining (p9 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 19**

S4 Analyse data sets taking account of different data structures and database designs.

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 Module Descriptors), Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Al and Data Mining (p9 L5 Module descriptors), Data Warehousing (p31 L5 Module descriptors)

See Also Map

# **KSB 20**

S5 Assess the impact on user experience and domain context on the data analysis activity.

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Al and Data Mining (p9 L5 Module descriptors), Business Intelligence and Visualisation (p18 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 21**

S6 Identify and escalate quality risks in data analysis with suggested mitigation/resolutions as appropriate.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 Module Descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

S7 Undertake customer requirements analysis and implement findings in data analytics planning and outputs.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 Module Descriptors), Professional Practice (p63 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 23**

S8 Identify data sources and the risks, challenges to combination within data analysis activity.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Data Warehousing (p31 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 24**

S9 Apply organizational architecture requirements to data analysis activities.

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Al and Data Mining (p9 L5 Module descriptors), Data Warehousing (p31 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 25**

S10 Apply statistical methodologies to data analysis tasks.

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Al and Data Mining (p9 L5 Module descriptors), Business Intelligence and Visualisation (p18 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occ. Map

S11 Apply predictive analytics in the collation and use of data.

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Al and Data Mining (p9 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 27**

S12 Collaborate and communicate with a range of internal and external stakeholders using appropriate styles and behaviours to suit the audience.

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Al and Data Mining (p9 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 28**

S13 Use a range of analytical techniques such as data mining, time series forecasting and modelling techniques to identify and predict trends and patterns in data.

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Al and Data Mining (p9 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 29**

S14 Collate and interpret qualitative and quantitative data and convert into infographics, reports, tables, dashboards and graphs.

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Al and Data Mining (p9 L5 Module descriptors), Business Intelligence and Visualisation (p18 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

S15 Select and apply the most appropriate data tools to achieve the best outcome.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4) Computer Architecture, Networks and Cyber (p11 L4) Al and Data Mining (p9 L5) Business Intelligence and Visualisation (p18 L5) Professional Practice (p63 L5) Data Warehousing (p31 L5) See Map

# **KSB 31**

B1 Maintain productive, professional and secure working environment

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Al and Data Mining (p9 L5 Module descriptors), Professional Practice (p63 L5 Module descriptors) See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 32**

B2 Shows initiative, being resourceful when faced with a problem and taking responsibility for solving problems within their own remit.

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Al and Data Mining (p9 L5 Module descriptors), Professional Practice (p63 L5 Module descriptors) See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 33**

B3 Works independently and collaboratively.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 Module Descriptors), Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Al and Data Mining (p9 L5 Module descriptors), Professional Practice (p63 L5 Module descriptors)

See Also Map

#### **KSB 34**

B4 Logical and analytical.

Is the statement covered within the qualification?

# Fully covered

# Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4) Computer Architecture, Networks and Cyber (p11 L4) Al and Data Mining (p9 L5) Business Intelligence and Visualisation (p18 L5) Professional Practice (p63 L5) Data Warehousing (p31 L5) See Map

# **KSB 35**

B5 Identifies issues quickly, enjoys investigating and solving complex problems and applies appropriate solutions. Has a strong desire to push to ensure the true root cause of any problem is found and a solution is identified which prevents recurrence.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4) Computer Architecture, Networks and Cyber (p11 L4) Al and Data Mining (p9 L5) Business Intelligence and Visualisation (p18 L5) Professional Practice (p63 L5) Data Warehousing (p31 L5) See Map

# **KSB 36**

B6 Demonstrates resilience by viewing obstacles as challenges and learning from failure.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Al and Data Mining (p9 L5 Module descriptors), Professional Practice (p63 L5 Module descriptors) See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 37**

B7 Demonstrates an ability to adapt to changing contexts within the scope of a project, direction of the organisation or Data Analyst role.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Al and Data Mining (p9 L5 Module descriptors), Professional Practice (p63 L5 Module descriptors) See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **Business analyst**

# **Business analyst**

# Knowledge, skills and behaviours coverage within the

# qualification

Please identify which knowledge, skill and behaviour statements from the occupational standard are covered within the qualification.

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# **KSBgenerator**

# **KSB**

# KSB<sub>1</sub>

K1 The definition of Business Analysis and the range of activities that constitute it.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Business Intelligence and Visualisation (p18 L5 Module descriptors), Requirements Engineering (p68 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Map

# KSB<sub>2</sub>

K2 The value of Business Analysis in enabling business improvement and delivering IT system changes.

#### Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Business Intelligence and Visualisation (p18 L5 Module descriptors), Requirements Engineering (p68 L5 Module descriptors)

See Map

K3 The role of the Business Analyst, and its relationship with other roles on a business change initiative, including those with system development responsibility.

Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Professional Practice (p63 L5 Module descriptors), Requirements Engineering (p68 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Map

# KSB 4

K4 Business change and system development life cycles, including the use of appropriate methodologies and the impact of organisational culture and context.

Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 Module Descriptors), Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Requirements Engineering (p68 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Map

# KSB 5

K5 The principles, features and differences of waterfall and agile methodologies for project delivery and software development.

Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Requirements Engineering (p68 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# KSB 6

K6 The importance of effective communication and engagement with a range of stakeholders in relation to Business Analysis assignments.

Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Professional Practice (p63 L5 Module descriptors), Requirements Engineering (p68 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# KSB 7

K7 The purpose and value of quality assurance techniques.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Requirements Engineering (p68 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# KSB 8

K8 Approaches to conducting internal and external environmental analysis of an industry domain.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 Module Descriptors), Strategic Business Planning (p76 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# KSB 9

K9 The advantages and disadvantages of a range of investigative techniques.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 Module Descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 10**

K10 The purpose of process modelling and the importance of an organisational view of business processes.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 Module Descriptors), Strategic Business Planning (p76 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

K11 Different approaches to document business processes including when it is most appropriate to use each.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 Module Descriptors), Strategic Business Planning (p76 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 12**

K12 Techniques to elicit requirements, including when it is most appropriate to use each.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Requirements Engineering (p68 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 13**

K13 The importance of eliciting requirements rather than gathering solution descriptions.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

ODULES: Professional Practice (p63 L5 Module descriptors), Requirements Engineering (p68 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 14**

K14 Approaches to categorise, validate and prioritise requirements.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

ODULES: Professional Practice (p63 L5 Module descriptors), Requirements Engineering (p68 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# K15 The importance of requirements management including change control.

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Requirements Engineering (p68 L5 Module descriptors), Strategic Business Planning (p76 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 16**

K16 A broad range of non-functional requirement areas, and the importance of including these within requirements engineering.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Requirements Engineering (p68 L5 Module descriptors), Strategic Business Planning (p76 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 17**

K17 The importance of considering user experience, accessibility and usability requirements in the design of digital solutions.

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Intelligence and Visualisation (p18 L5 Module descriptors), Professional Practice (p63 L5 Module descriptors), Requirements Engineering (p68 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Map

# **KSB 18**

K18 The value of data to an organisation, and how data needs are considered in business improvement.

#### Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Business Intelligence and Visualisation (p18 L5)

Professional Practice (p63 L5), Requirements Engineering (p68 L5), Strategic Business Planning (p76 L5)

K19 The purpose and activities of the gap analysis process.

#### Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 Module Descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 20**

K20 The role of the business analyst in facilitating business acceptance of changes.

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES:Business Systems and Data Analysis (p1 L4 Module Descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 21**

K21 The different phases of testing of business and system changes.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Strategic Business Planning (p76 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 22**

K22 The importance and the principles of engaging internal and external stakeholders.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Requirements Engineering (p68 L5 Module descriptors), Strategic Business Planning (p76 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Map

K23 Techniques to support the identification and analysis of internal and external stakeholders.

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 24**

K24 The purpose and importance of business change impact assessment.

# Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Strategic Business Planning (p76 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 25**

K25 The concepts of benefits realisation and management.

# Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 Module Descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **KSB 26**

K26 Legislation and industry standards relevant to the organisation and sector.

#### Is the statement covered within the qualification?

Fully covered

# Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 Module Descriptors), Business Intelligence and Visualisation (p18 L5 Module descriptors), Professional Practice (p63 L5 Module descriptors), Requirements Engineering (p68 L5 Module descriptors)

Map

#### **KSB 27**

K27 Data protection regulations and the importance of managing information and data in line with legislation and organisational policies.

Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Computer Architecture, Networks and Cyber (p11 L4),

Business Intelligence and Visualisation (p18 L5), Professional Practice (p63 L5)

See Also HTQ Map

#### **KSB 28**

K28 Technology and industry trends across the digital sector, and the opportunities these bring for business improvement and IT solutions.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Requirements Engineering (p68 L5 Module descriptors), Strategic Business Planning (p76 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Map

## **KSB 29**

S1 Apply appropriate approaches to scope, plan and perform Business Analysis.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Computer Architecture, Networks and Cyber (p11 L4), Requirements Engineering (p68 L5), Strategic Business Planning (p76 L5)

See Also HTQ Map

#### **KSB 30**

S2 Communicate effectively in a variety of situations with a range of stakeholders.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Requirements Engineering (p68 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 31**

S3 Apply a range of structured investigation techniques to a business situation.

## Is the statement covered within the qualification?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Business Intelligence and Visualisation (p18 L5), Professional Practice (p63 L5), Strategic Business Planning (p76 L5)

See Also FdSc Computer Science (Technical) HTQ Map

#### **KSB 32**

S4 Produce an outline definition of a business situation using an appropriate technique.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Computer Architecture, Networks and Cyber (p11 L4), Business Intelligence and Visualisation (p18 L5), Professional Practice (p63 L5)

See Also FdSc Computer Science (Technical) HTQ Map

## **KSB 33**

S5 Apply appropriate techniques to identify problems and opportunities within a business situation.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Strategic Business Planning (p76 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 34**

S6 Support the identification and presentation of proposed actions to stakeholders to gain agreement for further analysis activity.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Professional Practice (p63 L5 Module descriptors), Requirements Engineering (p68 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 35**

S7 Apply appropriate techniques to analyse and document options and recommendations for change.

## Is the statement covered within the qualification?

MODULES: Professional Practice (p63 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 36**

S8 Elicit process information from stakeholders.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Computer Architecture, Networks and Cyber (p11 L4), Professional Practice (p63 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 37**

S9 Model business processes using relevant techniques, standards, notation and software tools.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Professional Practice (p63 L5), Strategic Business Planning (p76 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 38**

S10 Analyse business process models to identify opportunities for improvement.

#### Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Computer Architecture, Networks and Cyber (p11 L4), Business Intelligence and Visualisation (p18 L5), Professional Practice (p63 L5)

See Also FdSc Computer Science (Technical) HTQ Map

## **KSB 39**

S11 Produce models of redesigned business processes.

#### Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Professional Practice (p63 L5), Strategic Business Planning (p76 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 40**

S12 Elicit requirements from stakeholders to identify business and user needs.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Professional Practice (p63 L5) Requirements Engineering (p68 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 41**

S13 Document clear functional and non-functional requirements in line with local standards.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Requirements Engineering (p68 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 42**

S14 Analyse documented requirements to remove duplication, conflict and overlap.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Requirements Engineering (p68 L5 Module descriptors), Strategic Business Planning (p76 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 43**

S15 Prioritise requirements using an appropriate prioritisation approach.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Requirements Engineering (p68 L5), Strategic Business Planning (p76 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 44**

S16 Validate requirements with stakeholders.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Requirements Engineering (p68 L5), Strategic Business Planning (p76 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 45**

S17 Support the establishment of requirements traceability.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Requirements Engineering (p68 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 46**

S18 Elicit business data needs from relevant sources.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Requirements Engineering (p68 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 47**

S19 Support the development of simple data models using relevant techniques, standards, notation and software tools.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 48**

S20 Document current business situations to enable gap analysis and decision making.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Computer Architecture, Networks and Cyber (p11 L4), Strategic

Business Planning (p76 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 49**

S21 Support the development of models of future state business situations.

#### Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 Module Descriptors), Strategic Business Planning (p76 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 50**

S22 Identify key differences between current and future business situations.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 Module Descriptors), Strategic Business Planning (p76 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 51**

S23 Identify actions required to move from the current to future business situation.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Computer Architecture, Networks and Cyber (p11 L4), Strategic

Business Planning (p76 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 52**

S24 Define acceptance criteria for business and system changes.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Strategic Business Planning (p76 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 53**

S25 Support business acceptance of business and system changes.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 Module Descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 54**

S26 Apply relevant techniques to research and identify stakeholders.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Requirements Engineering (p68 L5 Module descriptors), Strategic Business Planning (p76 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 55**

S27 Analyse and document stakeholders' areas of interest and influence.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Requirements Engineering (p68 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 56**

S28 Support the development of cost/benefit analysis for proposed business changes.

Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 Module Descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 57**

S29 Evaluate and document the key impacts on people, process, organisation, technology and information.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Strategic Business Planning (p76 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 58**

S30 Present information and concepts in a manner appropriate to the audience.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11), Business Intelligence and Visualisation (p18 L5), Professional Practice (p63 L5), Requirements Engineering (p68 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 59**

B1 Act logically, analytically and objectively in a range of situations.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Business Intelligence and Visualisation (p18 L5), Professional Practice (p63 L5), Requirements Engineering (p68 L5), Strategic Business Planning (p76 L5)

See Also HTQ Map

## **KSB 60**

B2 Apply creative thinking when problem solving.

## Is the statement covered within the qualification?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Professional Practice (p63 L5), Requirements Engineering (p68 L5), Strategic Business Planning (p76 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 61**

B3 Work independently and collaboratively.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Professional Practice (p63 L5), Requirements Engineering (p68 L5), Strategic Business Planning (p76 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 62**

B4 Use own initiative and take responsibility appropriate to the role of Business Analyst.

#### Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

Business Systems and Data Analysis (p1 L4), Computer Architecture, Networks and Cyber (p11 L4), Professional Practice (p63 L5), Requirements Engineering (p68 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 63**

B5 Take a thorough and organised approach and plan analysis activities in line with business priorities.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

Business Systems and Data Analysis (p1 L4), Computer Architecture, Networks and Cyber (p11 L4), Professional Practice (p63 L5), Requirements Engineering (p68 L5), Strategic Business Planning (p76 L5)

See Also FdSc Computer Science (Technical) HTQ Ma

#### **KSB 64**

B6 Build and maintain positive working relationships with a range of people.

## Is the statement covered within the qualification?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Professional Practice (p63 L5), Requirements Engineering (p68 L5), Strategic Business Planning (p76 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 65**

B7 Use a range of methods of communication appropriate to the situation.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Business Intelligence and Visualisation (p18 L5), Professional Practice (p63 L5), Requirements Engineering (p68 L5), Strategic Business Planning (p76 L5)

See Also HTQ Map

## **KSB 66**

B8 Maintain a productive, professional and secure working environment.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Professional Practice (p63 L5 Module descriptors), Strategic Business Planning (p76 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 67**

B9 Aware of the wider business environment and own contribution to business objectives.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Professional Practice (p63 L5 Module descriptors), Requirements Engineering (p68 L5 Module descriptors), Strategic Business Planning (p76 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 68**

B10 Be comfortable and confident interacting with people from technical and non-technical backgrounds.

## Is the statement covered within the qualification?

MODULES: Professional Practice (p63 L5 Module descriptors), Requirements Engineering (p68 L5 Module descriptors), Strategic Business Planning (p76 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 69**

B11 Tailor manner of presentation to be appropriate to the audience.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Business Intelligence and Visualisation (p18 L5), Professional Practice (p63 L5), Requirements Engineering (p68 L5)

See Also FdSc Computer Science (Technical) HTQ Map

## **KSB 70**

B12 Work flexibly and effectively as part of a multidisciplinary team throughout the full lifecycle.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Professional Practice (p63 L5), Strategic Business Planning (p76 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Stand

## **KSB 71**

B13 Demonstrate commitment to continuous professional development in relation to Business Analysis and the digital sector.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Professional Practice (p63 L5 Module descriptors), Requirements Engineering (p68 L5 Module descriptors), Strategic Business Planning (p76 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# **Network engineer**

# **Network engineer**

# Knowledge, skills and behaviours coverage within the qualification

Please identify which knowledge, skill and behaviour statements from the occupational standard are covered within the qualification.

Where knowledge, skill and behaviour statements are covered, please provide a reference to the qualification content. This should be a unit or module reference along with associated page/paragraph/line numbers (as appropriate) in the attached specification. Please be as specific as possible which content in the qualification aligns to the statement in the standard.

Where knowledge, skill or behaviour statements are partially covered or not covered, you will be asked to provide a rationale for the exclusion of this content from the qualification. The employer engagement evidence provided should support this rationale.

The following questions assess how knowledge, skill and behaviour statements from the occupational standards are covered within the qualification.

This page has automatically generated an item for each knowledge, skill and behaviour statement (KSB) contained within the chosen standard. So please do not remove or add any further KSBs, as it requires the exact number.

# **KSBgenerator**

## **KSB**

## KSB<sub>1</sub>

K1 The causes and consequences of network and IT infrastructure failures.

#### Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Advanced Routing and Switching and Troubleshooting (p5 L5), Cloud Architecture (p22 L5), Virtualization and Network Security (p85 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## KSB 2

K2 The architecture of typical IT systems, including hardware, OS, server, virtualisation, voice, cloud, and applications.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Introduction to Software Development (p6 L4), Cloud Architecture (p22 L5), Virtualization and Network Security (p85 L5)

See Also HTQ Map

#### KSB 3

K3 The techniques for systems performance and optimisation.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Advanced Routing and Switching and Troubleshooting (p5 L5), Cloud Architecture (p22 L5), Virtualization and Network Security (p85 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## KSB 4

K4 Diagnostic techniques and tools to interrogate and gather information regarding systems performance.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Advanced Routing and Switching and Troubleshooting (p5 L5), Cloud Architecture (p22 L5), Virtualization and Network Security (p85 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## KSB 5

K5 Organizational procedures to deal with recording information effectively and in line with protocols.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Cloud Architecture (p22 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## KSB 6

K6 Service Level Agreements (SLAs) and their application to delivering network engineering activities in line with contractual obligations and customer service.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Advanced Routing and Switching and Troubleshooting (p5 L5 Module descriptors), Cloud Architecture (p22 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## KSB 7

K7 Their role in Business Continuity and Disaster Recovery.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Advanced Routing and Switching and Troubleshooting (p5 L5 Module descriptors), Cloud Architecture (p22 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## KSB 8

K8 The purposes and uses of ports and protocols.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Advanced Routing and Switching and Troubleshooting (p5 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## KSB9

K9 Devices, applications, protocols, and services at their appropriate OSI and/or TCP/IP layers.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Advanced Routing and Switching and Troubleshooting (p5 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 10**

K10 The concepts and characteristics of routing and switching.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Advanced Routing and Switching and Troubleshooting (p5 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 11**

K11 The characteristics of network topologies, types, and technologies.

Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Advanced Routing and Switching and Troubleshooting (p5 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 12**

K12 Wireless technologies and configurations.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 13**

K13 Cloud concepts and their purposes.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cloud Architecture (p22 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 14**

K14 Functions of network services.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Advanced Routing and Switching and Troubleshooting (p5 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 15**

K15 The different types of network maintenance.

## Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Advanced Routing and Switching and Troubleshooting (p5 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 16**

K16 How current legislation relates to or impacts occupation.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 Module Descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 17**

K17 Troubleshooting methodologies for network and IT infrastructure.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Advanced Routing and Switching and Troubleshooting (p5 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 18**

K18 How to integrate a server into a network.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Cloud Architecture (p22 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 19**

K19 The types of security threats to networks and IT infrastructure assets.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Cloud Architecture (p22 L5 Module descriptors), Virtualization and Network Security (p85 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 20**

K20 How to use tools to automate network tasks.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Cloud Architecture (p22 L5 Module descriptors), Virtualization and Network Security (p85 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 21**

**K21** Approaches to change management.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4) Advanced Routing and Switching and Troubleshooting (p5 L5), Cloud Architecture (p22 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 22**

S1 Apply the appropriate tools and techniques when securely operating and testing Networks.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Virtualization and Network Security (p85 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 23**

S2 Install and configure the elements required to maintain and manage a secure Network.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 24**

S3 Implement techniques to monitor and record systems performance in line with defined specifications.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Cloud Architecture (p22 L5 Module descriptors), Virtualization and Network Security (p85 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 25**

S4 Maintain security and performance of the system against known and standard threats.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Cloud Architecture (p22 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 26**

S5 Apply the appropriate tools and techniques to identify systems performance issues.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Cloud Architecture (p22 L5 Module descriptors), Virtualization and Network Security (p85 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 27**

S6 Apply the appropriate tools and techniques to gather information to troubleshoot issues and isolate, repair or escalate faults.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Advanced Routing and Switching and Troubleshooting (p5 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 28**

S7 Communicate outcomes of tasks and record in line with organisational procedures and SLAs including adherence to good customer service standards.

Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Advanced Routing and Switching and Troubleshooting (p5 L5 Module descriptors), Professional Practice (p63 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 29**

S8 Upgrade, apply and test components to systems configurations ensuring that the system meets the organisation's requirements and minimises downtime. This should include backup processes.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Advanced Routing and Switching and Troubleshooting (p5 L5 Module descriptors), Virtualization and Network Security (p85 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 30**

S9 Record task details whether face-to-face, remote or in writing in line with ogranisational requirements.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Advanced Routing and Switching and Troubleshooting (p5 L5 Module descriptors), Virtualization and Network Security (p85 L5 Module descriptors), Professional Practice (p63 L5 Module descriptors)

See Also HTQ Map

#### **KSB 31**

S10 Interpret information received from a manager, customer or technical specialist and accurately implement the defined requirements.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Introduction to Software Development (p6 L4), Cloud Architecture (p22 L5), Professional Practice (p63 L5), Virtualization and Network Security (p85 L5)

See Also HTQ Map

## **KSB 32**

S11 Monitor, identify and implement required maintenance procedures.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Cloud Architecture (p22 L5 Module descriptors), Virtualization and Network Security (p85 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 33**

S12 Implement techniques to optimise systems performance in line with defined specifications.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Pathway Project (p59 L5 Module descriptors), Cloud Architecture (p22 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 34**

S13 Organise and prioritise clients/stakeholders' requests in line with SLAs and organization processes.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 Module Descriptors), Pathway Project (p59 L5 Module descriptors),

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 35**

S14 Explain their job role within the business context to stakeholders to enable a clear understanding on both sides of what their remit is and convey technical constraints in appropriate language considering accessibility and diversity implications.

#### Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Introduction to Software Development (p6 L4), Cloud Architecture (p22 L5), Professional Practice (p63 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 36**

S15 Operate securely and apply the appropriate process, policies, and legislation within their business responsibilities.

Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 Module Descriptors), Cloud Architecture (p22 L5 Module descriptors), Professional Practice (p63 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 37**

S16 Communicate with a range of stakeholders taking into consideration of organisations cultural awareness and technical ability.

Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Professional Practice (p63 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 38**

S17 Apply the appropriate level of responsibility when planning and prioritizing work tasks.

Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Professional Practice (p63 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 39**

S18 Apply the relevant numerical skills (Binary, dotted decimal notation) required to meet the defines specifications.

Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 40**

S19 Ensure compliance of network engineering outputs with change management processes.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Advanced Routing and Switching and Troubleshooting (p5 L5 Module descriptors), Cloud Architecture (p22 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 41**

S20 Select the appropriate tools and comply with organisation policies and processes when upgrading systems.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Advanced Routing and Switching and Troubleshooting (p5 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 42**

B1 Work independently and demonstrate initiative being resourceful when faced with a problem and taking responsibility for solving problems within their own remit.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Advanced Routing and Switching and Troubleshooting (p5 L5), Cloud Architecture (p22 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 43**

B2 Work securely within the business.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Intelligence and Visualisation (p18 L5 Module descriptors), Professional Practice (p63 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 44**

B3 Work within the goals, vision, and values of the organisation.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Intelligence and Visualisation (p18 L5 Module descriptors), Professional Practice (p63 L5 Module descriptors), Cloud Architecture (p22 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 45**

B4 Take a wider view of the strategic objectives of the tasks/ projects they are working on including the implications for accessibility by users and diversity.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Introduction to Software Development (p6 L4), Advanced Routing and Switching and Troubleshooting (p5 L5), Cloud Architecture (p22 L5)

See Also HTQ Map

## **KSB 46**

B5 Works to meet or exceed customers' requirements and expectations.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Advanced Routing and Switching and Troubleshooting (p5 L5), Professional Practice (p63 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 47**

B6 Identifies issues quickly, investigates and solves complex problems and applies appropriate solutions. Ensures the true root cause of any problem is found and a solution is identified which prevents recurrence.

#### Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Advanced Routing and Switching and Troubleshooting (p5 L5), Professional Practice (p63 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 48**

B7 Committed to continued professional development to ensure growth in professional skill and knowledge.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems & Data Analysis (p1 L4) Computer Architecture, Networks & Cyber (p11 L4) Introduction to Software Development (p6 L4) Advanced Routing & Switching & Troubleshooting (p5 L5) Cloud Architecture (p22 L5) Prof. Practice (p63 L5)

## **KSB 49**

B8 Work effectively under pressure showing resilience.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Advanced Routing and Switching and Troubleshooting (p5 L5), Cloud Architecture (p22 L5), Professional Practice (p63 L5)

See Also FdSc Computer Science (Technical) HTQ Map

## Software developer

# Software developer

# Knowledge, skills and behaviours coverage within the qualification

Please identify which knowledge, skill and behaviour statements from the occupational standard are covered within the qualification.

Where knowledge, skill and behaviour statements are covered, please provide a reference to the qualification content. This should be a unit or module reference along with associated page/paragraph/line numbers (as appropriate) in the attached specification. Please be as specific as possible which content in the qualification aligns to the statement in the standard.

Where knowledge, skill or behaviour statements are partially covered or not covered, you will be asked to provide a rationale for the exclusion of this content from the qualification. The employer engagement evidence provided should support this rationale.

The following questions assess how knowledge, skill and behaviour statements from the occupational standards are covered within the qualification.

This page has automatically generated an item for each knowledge, skill and behaviour statement (KSB) contained within the chosen standard. So please do not remove or add any further KSBs, as it requires the exact number.

# **KSBgenerator**

## **KSB**

## KSB<sub>1</sub>

K1 All stages of the software development life cycle (what each stage contains, including the inputs and outputs).

Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Introduction to Software Development (p6 L4), Mobile App Development (p52 L5), Professional Practice (p63 L5), Server-side Development, (p72 L5), Web Development (p89 L5)

See Also HTQ Map

## KSB 2

K2 Roles and responsibilities within the software development lifecycle (who is responsible for what).

Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Professional Practice (p63 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### KSB 3

K3 The roles and responsibilities of the project life cycle within your organisation, and your role.

Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Professional Practice (p63 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## KSB 4

K4 How best to communicate using the different communication methods and how to adapt appropriately to different audiences.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Professional Practice (p63 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## KSB 5

K5 The similarities and differences between different software development methodologies, such as agile and waterfall.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Introduction to Software Development (p6 L4) Mobile App Development (p52 L5) Professional Practice (p63 L5) Server-side Development (p72 L5) Web Development (p89 L5)

See Also HTQ Map

## KSB 6

K6 How teams work effectively to produce software and how to contribute appropriately.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Professional Practice (p63 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## KSB 7

K7 Software design approaches and patterns, to identify reusable solutions to commonly occurring problems.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Introduction to Software Development (p6 l4) API Development (p14 L5) Mobile App Development (p52 L5) Server-side Development (p72 L5) Web Development (p89 L5)

See Also HTQ Map

## KSB 8

K8 Organisational policies and procedures relating to the tasks being undertaken, and when to follow them. For example, the storage and treatment of GDPR sensitive data.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Professional Practice (p63 L5 Module descriptors)

#### KSB 9

K9 Principles of algorithms, logic and data structures relevant to software development for example: arrays, stacks, queues, linked lists, trees, graphs, hash tables, sorting algorithms, searching algorithms, critical sections and race conditions.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Introduction to Software Development (p6 l4) API Development (p14 L5) Mobile App Development (p52 L5) Server-side Development (p72 L5) Web Development (p89 L5)

See Also HTQ Map

## **KSB 10**

K10 Principles and uses of relational and non-relational databases

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4) Introduction to Software Development (p6 L4) Mobile App Development (p52 L5) Server-side Development (p72 L5)

See Also HTQ Map

#### **KSB 11**

#### K11 Software designs and functional/technical specifications

#### Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Introduction to Software Development (p6 L4) API Development (p14 L5) Mobile App Development (p52 L5) Professional Practice (p63 L5) Server-side Development (p72 L5)

See Also HTQ Map

## **KSB 12**

## K12 Software testing frameworks and methodologies

#### Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: API Development (p14 L5 Module descriptors), Professional Practice (p63 L5 Module descriptors), Server-side Development (p72 L5 Module descriptors), Web Development (p89 L5 Module descriptors)

## **KSB 13**

S1 Create logical and maintainable codes.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Introduction to Software Development (p6 L4), API Development (p14 L5), Mobile App Development (p52 L5), Server-side Development (p72 L5)
Web Development (p89 L5)

See Also HTQ Map

## **KSB 14**

S2 Develop effective user interfaces.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Introduction to Software Development (p6 L4 Module Descriptors), Mobile App Development (p52 L5 Module descriptors), Professional Practice (p63 L5 Module descriptors), Web Development (p89 L5 Module descriptors)

See Also HTQ Map

## **KSB 15**

S3 Link code to data sets.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Al and Data Mining (p9 L5), Mobile App Development (p52 L5), Professional Practice (p63 L5), Server-side Development (p72 L5), Web Development (p89 L5)

See Also HTQ Map

## **KSB 16**

S4 Test code and analyse results to correct errors found using unit testing.

#### Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Introduction to Software Development (p6 L4 Module Descriptors), Al and Data Mining (p9 L5 Module descriptors), Mobile App Development (p52 L5 Module descriptors), Server-side Development

(p72 L5 Module descriptors)

See Also HTQ Map

#### **KSB 17**

S5 Conduct a range of test types, such as Integration, System, User Acceptance, Non-Functional, Performance and Security testing.

#### Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Introduction to Software Development (p6 L4), API Development (p14 L5), Mobile App Development (p52 L5), Server-side Development (p72 L5) Web Development (p89 L5)

See Also HTQ Map

## **KSB 18**

S6 Identify and create test scenarios.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

Introduction to Software Development (p6 L4), API Development (p14 L5), Professional Practice (p63 L5), Server-side Development (p72 L5), Web Development (p89 L5)

See Also HTQ Map

## **KSB 19**

S7 Apply structured techniques to problem solving, can debug code and can understand the structure of programmes to identify and resolve issues.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Introduction to Software Development (p6 L4), API Development (p14 L5), Mobile App Development (p52 L5), Server-side Development (p72 L5) Web Development (p89 L5)

See Also HTQ Map

## **KSB 20**

S8 Create simple software designs to effectively communicate understanding of the program.

## Is the statement covered within the qualification?

MODULES: Introduction to Software Development (p6 L4), API Development (p14 L5), Mobile App Development (p52 L5), Server-side Development (p72 L5) Web Development (p89 L5), Professional Practice (p63 L5)

See Also HTQ Map

## **KSB 21**

S9 Create analysis artefacts, such as use cases and/or user stories.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Professional Practice (p63 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 22**

S10 Build, manage and deploy code into the relevant environment.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Introduction to Software Development (p6 L4), API Development (p14 L5), Mobile App Development (p52 L5), Server-side Development (p72 L5)
Web Development (p89 L5), Professional Practice (p63 L5)

See Also HTQ Map

## **KSB 23**

S11 Apply an appropriate software development approach according to the relevant paradigm (for example object oriented, event driven or procedural).

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Introduction to Software Development (p6 L4), API Development (p14 L5), Mobile App Development (p52 L5), Server-side Development (p72 L5)
Web Development (p89 L5)

See Also HTQ Map

## **KSB 24**

S12 Follow software designs and functional/technical specifications.

Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: API Development (p14 L5 Module descriptors), Mobile App Development (p52 L5 Module descriptors), Professional Practice (p63 L5 Module descriptors), Web Development (p89 L5 Module descriptors)

See Also HTQ Map

## **KSB 25**

S13 Follow testing frameworks and methodologies.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: API Development (p14 L5 Module descriptors), Server-side Development (p72 L5 Module descriptors), Web Development (p89 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 26**

S14 Follow company, team or client approaches to continuous integration, version and source control.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Professional Practice (p63 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 27**

S15 Communicate software solutions and ideas to technical and non-technical stakeholders.

#### Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MOBILES: Mobile App Development (p52 L5 Module descriptors), Professional Practice (p63 L5 Module descriptors), Server-side Development (p72 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 28**

S16 Apply algorithms, logic and data structures.

#### Is the statement covered within the qualification?

MODULES: Business Systems and Data Analysis (p1 L4 Introduction to Software Development (p6 L4) API Development (p14 L5) Mobile App Development (p52 L5) Server-side Development (p72 L5) Web Development (p89 L5)

See Also HTQ Map

## **KSB 29**

S17 Interpret and implement a given design whist remaining compliant with security and maintainability requirements.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4) AI and Data Mining (p9 L5) Mobile App Development (p52 L5) Professional Practice (p63 L5) Server-side Development (p72 L5)

See Also HTQ Map

#### **KSB 30**

B1 Works independently and takes responsibility. For example, has a disciplined and responsible approach to risk, and stays motivated and committed when facing challenges.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Introduction to Software Development (p6 L4) API Development (p14 L5) Mobile App Development (p52 L5) Professional Practice (p63 L5) Server-side Development (p72 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 31**

B2 Applies logical thinking. For example, uses clear and valid reasoning when making decisions related to undertaking work instructions.

#### Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4 Introduction to Software Development (p6 L4) API Development (p14 L5) Mobile App Development (p52 L5) Server-side Development (p72 L5) Web Development (p89 L5)

See Also HTQ Map

#### **KSB 32**

B3 Maintains a productive, professional and secure working environment.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Professional Practice (p63 L5 Module descriptors), Server-side Development (p72 L5 Module descriptors) See Also FdSc Computer Science (Technical) HTQ Occupational Standards

## **KSB 33**

B4 Works collaboratively with a wide range of people in different roles, internally and externally, with a positive attitude to inclusion & diversity.

## Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Professional Practice (p63 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 34**

B5 Acts with integrity with respect to ethical, legal and regulatory ensuring the protection of personal data, safety and security.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4 Module Descriptors), Professional Practice (p63 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 35**

B6 Shows initiative for solving problems within their own remit, being resourceful when faced with a problem to solve.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Introduction to Software Development (p6 L4), Mobile App Development (p52 L5), Professional Practice (p63 L5), Server-side Development (p72 L5), Web Development (p89 L5)

See Also HTQ Map

#### **KSB 36**

B7 Communicates effectively in a variety of situations to both a technical and nontechnical audience.

## Is the statement covered within the qualification?

## **KSB 37**

B8 Shows curiosity to the business context in which the solution will be used, displaying an inquisitive approach to solving the problem. This includes the curiosity to explore new opportunities, and techniques; the tenacity to improve methods and maximise performance of the solution; and creativity in their approach to solutions.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Professional Practice (p63 L5 Module descriptors), Server-side Development (p72 L5 Module descriptors)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## **KSB 38**

B9 Demonstrates creativity and tenacity in their approach to solutions and the methods used to come to a solution for example, sees the task through to the end by devising new solutions and despite obstacles and problems along the way.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Introduction to Software Development (p6 L4), Mobile App Development (p52 L5), Professional Practice (p63 L5), Server-side Development (p72), Web Development (p89 L5)

See Also HTQ Map

## **KSB 39**

B10 Committed to continued professional development.

## Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4) Computer Architecture, Networks and Cyber (p11 L4) API Development (p14 L5) Mobile App Development (p52 L5) Server-side Development (p72 L5) Web Development (p89 L5)

See Also HTQ Map

## Software tester

## Software tester

# Knowledge, skills and behaviours coverage within the qualification

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# **KSBgenerator**

## **KSB**

## KSB<sub>1</sub>

K1 The relationship between testing and quality assurance and how testing contributes to higher quality.

Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), API Development (p14 L5), Managing Software Testing (p48 L5), Test Automation (p81 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### KSB 2

K2 The difference between error, defect, and failure including the distinction between the root cause of a defect and its effects.

Is the statement covered within the qualification?

Fully covered

## Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis, Managing Software Testing (p48 L5), Test Automation (p81 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## KSB 3

K3 The impact of context on the test process including the activities, tasks and work products that support the test process.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Managing Software Testing (p48 L5), Test Automation (p81 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## KSB 4

K4 The need for traceability between the requirements/test basis and the test work products.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Managing Software Testing (p48 L5), Test Automation (p81 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## KSB 5

K5 The principles underpinning the psychology of testing including how the required mindset differs from the development mindset, and how this can influence success of software testing activities.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Managing Software Testing (p48 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## KSB 6

K6 The importance of accuracy and clear documentation of software tests and defects.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: API Development (p14 L5), Managing Software Testing (p48 L5), Test Automation (p81 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### KSB 7

K7 The relationship between test activities and software development activities in the Software Development Lifecycle.

Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), API Development (p14 L5), Managing Software Testing (p48 L5), Test Automation (p81 L5) Professional Practice (p63 L5), Web Development (p89 L5)

See Also HTQ Map

#### KSB 8

K8 The application of testing across different recognised software development methodologies (sequential and iterative).

Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: API Development (p14 L5), Managing Software Testing (p48 L5), Test Automation (p81 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### KSB 9

K9 The range and features of software test types within the broad categories of Functional, Non-Functional, White Box/Structural and Change-related Testing.

Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Managing Software Testing (p48 L5), Test Automation (p81 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 10**

K10 The objectives and approaches for testing at different Test Levels (such as Unit Testing, Component Integration Testing, System Integration Testing and User Acceptance Testing).

Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), API Development (p14 L5), Test Automation (p81 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 11**

K11 The role of static testing techniques and the review process in early defect detection.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: API Development (p14 L5), Managing Software Testing (p48 L5), Test Automation (p81 L5), Web Development (p89 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 12**

K12 The characteristics of Black Box, White Box and Experience-based Test Techniques.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: API Development (p14 L5), Managing Software Testing (p48 L5), Test Automation (p81 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 13**

K13 The application of common Black Box Techniques to derive test conditions and test cases (Equivalence Partitioning, Boundary Value Analysis, Decision Table Testing and State Transition Testing).

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: API Development (p14 L5), Managing Software Testing (p48 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 14**

K14 The role of software testing within the context of project and product risk reduction in the systems development life cycle.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Test Automation (p81 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 15**

K15 The defect management process.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Test Automation (p81 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 16**

K16 The typical metrics used to support the monitoring and control of testing.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: API Development (p14 L5), Test Automation (p81 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 17**

K17 The classification of tools to support testing.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Test Automation (p81 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 18**

K18 The role of test automation in the context of the software development lifecycle.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: API Development (p14 L5), Test Automation (p81 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 19**

K19 The need for conformance to specific industry standards where appropriate (such as GDPR, health informatics, safety critical, etc.) related to software testing.

Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), API Development (p14 L5), Managing Software Testing (p48 L5), Professional Practice (p63 L5), Test Automation (p81 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 20**

K20 Where Software Testers fit within the wider team and the roles and responsibilities that others play.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Introduction to Software Development (p6 L4), Managing Software Testing (p48 L5), Professional Practice (p63 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 21**

K21 The characteristics of software architecture that impact on software testing in the development lifecycle.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Introduction to Software Development (p6 L4), API Development (p14 L5), Managing Software Testing (p48 L5), Professional Practice (p63 L5), Test Automation (p81 L5)

See Also HTQ Map

#### **KSB 22**

K22 The core testing behaviours, skills and tools that are common to developers, testers, and multi-skilled roles in development lifecycles.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), API Development (p14 L5), Managing Software Testing (p48 L5), Professional Practice (p63 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 23**

K23 The typical security vulnerabilities that should be addressed by testing in general and

specifically by penetration testing.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Computer Architecture, Networks and Cyber (p11 L4), Test Automation (p81 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 24**

S1 Apply static test techniques.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Managing Software Testing (p48 L5), Test Automation (p81 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 25**

S2 Apply Black Box test techniques such as Equivalence Partitioning, Boundary Value Analysis, Decision Table Testing and State Transition Testing.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Managing Software Testing (p48 L5), Test Automation (p81 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 26**

S3 Analyse test objectives and requirements/test basis to define test scope and coverage criteria.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), API Development (p14 L5), Managing Software Testing (p48 L5), Professional Practice (p63 L5), Test Automation (p81 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 27**

S4 Use tools to automate, manage or support any test activity.

Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Managing Software Testing (p48 L5), Test Automation (p81 L5), API Development (p14 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 28**

S5 Apply a regression strategy including selection of tests, maintenance of regression suites and identifying tests suitable for automation.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Test Automation (p81 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 29**

S6 Use defect tracking tools.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Test Automation (p81 L5), API Development (p14 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 30**

S7 Adapt and apply testing activities according to industry standard development methodologies (sequential and iterative).

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Introduction to Software Development (p6 L4), API Development (p14 L5), Managing Software Testing (p48 L5), Test Automation (p81 L5), Web Development (p89 L5)

See Also HTQ Map

#### **KSB 31**

S8 Apply the range of different software test types within the broad categories of Functional, Non-Functional (Security, Performance & Usability), and White Box/Structural Testing.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Managing Software Testing (p48 L5), Test Automation (p81 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 32**

S9 Apply and support testing at different Test Levels appropriate to the Software Development Lifecycle (such as Unit Testing, Component Integration Testing, System Testing, System Integration Testing and User Acceptance Testing), taking into account the fundamentals of testing.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Introduction to Software Development (p6 L4), API Development (p14 L5), Managing Software Testing, (p48 L5), Test Automation (p81 L5), Web Development (p89 L5)

See Also HTQ Map

#### **KSB 33**

S10 Conform to specific industry standards where appropriate (such as GDPR, health informatics, safety critical, etc.) related to software testing.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Managing Software Testing (p48 L5), Professional Practice (p63 L5), Test Automation (p81 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 34**

S11 Maintain up to date knowledge of technological developments in the field of Software Testing.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Managing Software Testing (p48 L5), Test Automation (p81 L5), API Development (p14 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 35**

S12 Record and interpret test progress and results, communicating test status to the relevant

#### stakeholders.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Introduction to Software Development (p6 L4), Managing Software Testing (p48 L5), Test Automation (p81 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 36**

S13 Design and follow tests to achieve coverage criteria.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Introduction to Software Development (p6 L4), API Development (p14 L5), Managing Software Testing (p48 L5), Test Automation (p81 L5)

See Also HTQ Map

#### **KSB 37**

B1 Maintains a productive, professional, and secure working environment.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Professional Practice (p63 L5), Managing Software Testing (p48 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 38**

B2 Works independently and takes responsibility. For example, disciplined and responsible approach to risk, works diligently regardless of how much they are being supervised, accepts responsibility for managing their own time and workload and stays motivated and committed when facing challenges.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Introduction to Software Development (p6 L4), Managing Software Testing (p48 L5), Professional Practice (p63 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 39**

B3 A problem solving mindset within their own remit, being inquisitive and resourceful when faced with a problem to solve. Applies appropriate solutions. ensuring the true root cause of any problem is found and a solution is identified which prevents recurrence.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), API Development (p14 L5), Managing Software Testing (p48 L5), Professional Practice (p63 L5), Test Automation (p81 L5), Web Development (p89 L5)

See Also HTQ Map

#### **KSB 40**

B4 Applies logical thinking, for example, uses clear and valid reasoning when making decisions related to undertaking the work instructions.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Computer Architecture, Networks and Cyber (p11 L4), Professional Practice (p63 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 41**

B5 Analytical - uses informal and formal techniques to deconstruct a scenario or test basis to identify tests that will demonstrate software and systems are fit for purpose.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems & Data Analysis (p1 L4) Computer Architecture, Networks & Cyber (p11 L4) Introduction to Software Development (p6 L4) API Development (p14 L5) Managing Software Testing (p48 L5) Professional Practice (p63 L5) Web Development

#### **KSB 42**

B6 Works collaboratively with a wide range of people in different roles, internally and externally, with a positive attitude to inclusion & diversity.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Managing Software Testing (p48 L5), Professional Practice (p63 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 43**

B7 Communicates effectively in a wide variety of situations; for example, contributing effectively to meetings and presenting complex information to technical and non-technical audience.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Managing Software Testing (p48 L5), Professional Practice (p63 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

## Digital accessibility specialist

# Digital accessibility specialist

# Knowledge, skills and behaviours coverage within the qualification

Please identify which knowledge, skill and behaviour statements from the occupational standard are covered within the qualification.

Where knowledge, skill and behaviour statements are covered, please provide a reference to the qualification content. This should be a unit or module reference along with associated page/paragraph/line numbers (as appropriate) in the attached specification. Please be as specific as possible which content in the qualification aligns to the statement in the standard.

Where knowledge, skill or behaviour statements are partially covered or not covered, you will be asked to provide a rationale for the exclusion of this content from the qualification. The employer engagement evidence provided should support this rationale.

The following questions assess how knowledge, skill and behaviour statements from the occupational standards are covered within the qualification.

This page has automatically generated an item for each knowledge, skill and behaviour statement (KSB) contained within the chosen standard. So please do not remove or add any further KSBs, as it requires the exact number.

## **KSBgenerator**

### **KSB**

#### KSB<sub>1</sub>

K1 The characteristics and categories of disabilities (including temporary, situational and permanent disabilities) and how these affect individuals.

Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Interface Design and Testing (p44 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### KSB<sub>2</sub>

K2 Commonly used accessibility guidelines (for example the Web Content Accessibility Guidelines, EN301549 and Section508), methods to implement and achieve conformance and how these assist users with disabilities.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Introduction to Software Development (p6 L4), Accessibility and User Experience (p1 L5), Interface Design and Testing (p44 L5), Web Development (p89 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### KSB<sub>3</sub>

K3 How accessibility is managed and integrated within an enterprise environment including policies, and reasonable adjustments.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Accessibility and User Experience (p1 L5), See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### KSB 4

K4 How to utilise productivity suites ensuring output is accessible and advising on the implementation of accessibility features and content.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Introduction to Software Development (p6 L4), Web Development (p89 L5), Web Frameworks (p93 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### KSB 5

K5 The implications and effect on users with disabilities, and UK businesses of international disability legislation (including Equality Act 2010, Public Sector Bodies (Websites and Mobile Applications) No. 2 Accessibility Regulations 2018 and Accessible Canada Act C81 2018).

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Web Development (p89 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### KSB 6

K6 How to present using relevant technologies and aids in a manner that communicates the information (including a business case) to the chosen target audience, and understand the key facts and figures relating to accessibility.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Professional Practice (p63 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### KSB 7

K7 The process to set-up, moderate and conduct activities relating to hosting workshops including moderation usability testing, user research testing and end-user testing.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Pathway Project (p59 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### KSB 8

K8 The basics of Hyper Text Mark-up Language, Cascading Style Sheets, JavaScript and Accessibility Rich Internet Applications, and how these should be used to enhance the accessibility of services (for example alt text, dynamic content, colour contrast).

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Introduction to Software Development (p6 L4), Interface Design and Testing (p44 L5), Web Development (p89 L5), Web Frameworks (p93 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### KSB 9

K9 How mobile applications are developed using appropriate development applications and the

#### basics of the languages used.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Introduction to Software Development (p6 L4), Web Frameworks (p93 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 10**

K10 The fundamentals of the Web Content Accessibility Guidelines (WCAG), including the purpose, application and utilisation of WCAG in a variety of situations (for example web, mobile, desktop applications).

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Introduction to Software Development (p6 L4), Accessibility and User Experience (p1 L5), Interface Design and Testing (p44 L5), Web Development (p89 L5), Web Frameworks (p93 L5)

See Also HTQ Map

#### **KSB 11**

K11 The basic principles of project management (including project life cycle methodologies), and how accessibility considerations are integrated.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Professional Practice (p63 L5), Pathway Project (p59 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 12**

K12 The accessibility considerations when designing and developing an application's user experience using related standards and guidelines including ISO9241 Ergonomics of human-system interaction, The Principles of Universal Design by the Centre for Universal Design and the Web Content Accessibility Guidelines to create an inclusive design.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Introduction to Software Development (p6 L4),

Accessibility and User Experience (p1 L5), Interface Design and Testing (p44 L5), Web Development (p89 L5), Web Frameworks (p93 L5)

See Also HTQ Map

#### **KSB 13**

K13 How to use assistive technologies (both digital and physical), their use-cases and functionality, degrees of complexity (hi-tech, low-tech and no-tech).

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Accessibility and User Experience (p1 L5), Interface Design and Testing (p44 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 14**

K14 How assistive technologies interact with other digital technologies.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Computer Architecture, Networks and Cyber (p11 L4), Accessibility and User Experience (p1 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 15**

K15 The principles and application of testing methodologies to accessibility criteria and assistive technologies, and the impact of accessibility findings (including test documentation).

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Accessibility and User Experience (p1 L5), Interface Design and Testing (p44 L5), Web Development (p89 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 16**

K16 How to construct a business report (for example document layout and contents).

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Professional Practice (p63 L5), Pathway

Project (p59 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 17**

K17 The purpose and importance of reasonable adjustments, and how these are managed.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Accessibility and User Experience (p1 L5), Pathway Project (p59 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 18**

K18 Best practices regarding digital security including General Data Protection Regulations 2018, how these are applied to an organisation and the factors which can result in these being effective and how these can be mitigated.

Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Computer Architecture, Networks and Cyber (p11 L4), Professional Practice (p63 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 19**

K19 The security considerations relating to the installation and utilisation of assistive technologies, how these tools may be misidentified by common security practices and the methods to mitigate such security constraints.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 20**

K20 How to communicate through different mediums, including tailoring communications to different user groups.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Accessibility and User Experience (p1 L5), Interface Design and Testing (p44 L5), Professional Practice (p63 L5), Web Development (p89 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 21**

K21 How to use incident management tools, triage incidents and appropriately communicate with assistive technology users.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 22**

K22 How to audit digital applications (including web and mobile applications) against digital assistive technologies including screen readers, screen magnifiers, speech to text and literacy aids.

Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Accessibility and User Experience (p1 L5), Interface Design and Testing (p44 L5), Web Development (p89 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 23**

K23 The preparation and processes required to conduct training with a variety of user groups for example project managers, web designers, developers, end users and line management.

Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Accessibility and User Experience (p1 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 24**

K24 How accessibility fits into the wider digital landscape, including current/future applicable regulatory requirements, and case law in the area of discriminating against employees with a disability.

Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4) Accessibility and User Experience (p1 L5) Interface Design and Testing (p44 L5 Professional Practice (p63 L5) Web Frameworks (p93 L5)

See Also HTQ Map

#### **KSB 25**

K25 How to use data ethically and the implications for wider society, with respect to the use of data, automation and artificial intelligence.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Computer Architecture, Networks and Cyber (p11 L4), Professional Practice (p63 L5), Pathway Project (p59 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 26**

S1 Present information, (for example business cases, testing findings, general information etc.) to a variety of audiences to ensure understanding.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Professional Practice (p63 L5), Pathway Project (p59 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 27**

S2 Use hardware and software based assistive technologies for a variety of applications (for example testing, training etc.).

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Accessibility and User Experience (p1 L5), Interface Design and Testing (p44 L5), Pathway Project (p59 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 28**

S3 Use Interpersonal skills to develop and maintain effective and credible professional relationships both within and outside the team.

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Professional Practice (p63 L5), Pathway Project (p59 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 29**

S4 Conduct testing against a variety of platforms using appropriate standards and/or guidelines and assistive technologies.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4) Accessibility and User Experience (p1 L5) Interface Design and Testing (p44 L5) Pathway Project (p59 L5) Web Development (p89 L5)

See Also HTQ Map

#### **KSB 30**

S5 Conduct workshops, surveys or focus groups, including the set-up, running and conclusion activities.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Interface Design and Testing (p44 L5), Professional Practice (p63 L5), Pathway Project (p59 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 31**

S6 Both written and verbal communication skills when working as a team or individually.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Interface Design and Testing (p44 L5), Professional Practice (p63 L5), Web Development (p89 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 32**

S7 Solve problems using a logical and analytical approach.

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4) Computer Architecture, Networks and Cyber (p11 L4) Introduction to Software Development (p6 L4) Professional Practice (p63 L5) Web Development (p89 L5)

See Also HTQ Map

#### **KSB 33**

S8 Identify appropriate assistive technologies and adaptive strategies for an individual's disability.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Introduction to Software Development (p6 L4), Interface Design and Testing (p44 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 34**

S9 Practice disability etiquette, when communicating with individuals with disabilities.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Accessibility and User Experience (p1 L5), Interface Design and Testing (p44 L5), Pathway Project (p59 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 35**

S10 Apply accessibility standards and regulations to practice.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Accessibility and User Experience (p1 L5), Interface Design and Testing (p44 L5), Web Development (p89 L5), Web Frameworks (p93 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 36**

S11 Uses productivities suites and implementing accessibility best practices (for example reading level, colour contrast etc.) into produced documentation.

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Accessibility and User Experience (p1 L5), Interface Design and Testing (p44 L5), Web Development (p89 L5), Web Frameworks (p93 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 37**

S12 Create business reports, business cases and documentation appropriate for the target audience (for example developers, management etc.).

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Professional Practice (p63 L5), Pathway Project (p59 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 38**

S13 Identifies and rectify issues being experienced using appropriate troubleshooting methods relating to a user's assistive technology.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Accessibility and User Experience (p1 L5), Interface Design and Testing (p44 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 39**

S14 Apply security best practices.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Computer Architecture, Networks and Cyber (p11 L4), Accessibility and User Experience (p1 L5), Interface Design and Testing (p44 L5), Web Development (p89 L5), Web Frameworks (p93 L5)

See Also HTQ

#### **KSB 40**

S15 Apply accessibility guidelines (for example WCAG, ISO9241 Ergonomics of human-system

interaction) when designing and developing solutions on a variety of platforms (for example web, mobile etc.).

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Accessibility and User Experience (p1 L5), Interface Design and Testing (p44 L5), Professional Practice (p63 L5), Pathway Project (p59 L5), Web Development (p89 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 41**

S16 Collate and research information, or statistics (for example disability statistics, appropriate assistive technology for specific disabilities and correct terminology) required to present, in a manner which is appropriate to the target audience of any training (for example project managers, web designers, developers, end users and line management).

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Business Systems and Data Analysis (p1 L4), Interface Design and Testing (p44 L5), Pathway Project (p59 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 42**

S17 Keep up-to-date with developments in technologies, trends and innovation using a range of sources.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

M: Business Systems & Data Analysis (p1 L4) Computer Architecture, Networks & Cyber (p11 L4) Accessibility & User Experience (p1 L5) Interface Design & Testing (p44 L5) Professional Practice (p63 L5) Web Development (p89 L5) Web Framewoks (p93 l5)

#### **KSB 43**

S18 Lead a group of individuals using basic leadership skills as to achieve a common goal.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Professional Practice (p63 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 44**

B1 Motivated, empathetic and driven in the field of accessibility and the wider digital sphere.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Computer Architecture, Networks and Cyber (p11 L4), Accessibility and User Experience (p1 L5), Interface Design and Testing (p44 L5), Professional Practice (p63 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 45**

**B2** Proactively Inclusive.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Accessibility and User Experience (p1 L5), Interface Design and Testing (p44 L5), Professional Practice (p63 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 46**

B3 Manages time effectively and adheres to timescales when producing work product.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Introduction to Software Development (p6 L4), Accessibility and User Experience (p1 L5), Interface Design and Testing (p44 L5), Pathway Project (p59 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

#### **KSB 47**

B4 Inquisitive, innovative and forward-thinking regarding digital technologies which could have beneficial implications for disabled individuals.

#### Is the statement covered within the qualification?

Fully covered

#### Where within the qualification is the statement covered?

MODULES: Accessibility and User Experience (p1 L5), Interface Design and Testing (p44 L5), Pathway Project (p59 L5)

See Also FdSc Computer Science (Technical) HTQ Occupational Standards Map

# Additional occupationally relevant content Additional occupationally relevant content

#### Item 1

As well as the content aligned to the knowledge, skills and behaviours in the occupational standard, the qualification can include additional occupationally relevant content which is deemed of value to employers. Awarding bodies are asked to justify any content that does not directly align to the occupational standard, using evidence from employers.

Content should be identified at a unit or modular level and each item should be added separately by using the Add Item button. If the qualification does not include any additional content, please leave this section blank.

#### Unit or module containing additional content

**Vendor Micro-credential Certifications** 

#### Please give a short description of the additional content

Throughout all pathways, students will have the opportunity to enhance their employability by taking a series of industry recognised certifications both in hardware and software.

#### Where within the qualification is the additional content covered?

Level 5 Professional Practice

Please provide an explanation of how the content is relevant to the occupation, including evidence from employers that supports its inclusion in the qualification.

These micro-credential certifications enhance employability as well as technical skill confidence for learners.

# **Assessment methods**

## **Assessment methods**

Please confirm that the assessment covers all of the content relevant to the knowledge, skills and behaviours in the occupational standard.
Yes

# Please outline the methods used to assess the content and provide a rationale for why these methods are valid for the qualification.

Students will approach studies from both practical and theoretical perspectives; and learn from the range of assessment activities that they will be subjected to. These activities are briefly summarised below. Students will receive both written and verbal feedback on these activities from tutors to assist them as they develop assessments, which is defined as 'formative feedback'. At the end when final assessments are marked students will receive summative feedback.

Blogs / logbooks - Students will be required to keep blogs that detail their learning.

Project - In Level 5 all students will identify a topic and investigate this, writing a report at the end.

Exams - Students will on some modules undertake written exams to apply knowledge they have learned in relation to given examination scenarios.

Technical Reports/Essays - Some modules will include essays where students are required to investigate topics and write these up presenting their own interpretations and conclusions.

Artefacts - Students will develop small computing artefacts on some modules to illustrate how they interpret designs they have made into a final solution.

Multiple choice questions (MCQs) - Tests will be used on some modules so students can show their knowledge by selecting appropriate answers from a range provided.

Presentations - In some module's presentations will be used to summarise findings the students have made in relation to a task or problem.

Practical/technical Demonstrations - In some modules, students will demonstrate the practical or technical output of their work.

All assessment mechanisms will focus, wherever possible, on integrating practical and theoretical methodologies to ensure that students can demonstrate their technical skills by way of showcasing their knowledge and understanding of the attendant theory whilst incorporating professional standards and behaviours.

The substantial range of facilities available within the Department and the University, contribute to generating a research/academic community environment and culture that impacts favourably on FdSc students. However, the resource that influences the learning of students most on this award is probably the staff - their approach to supporting students, their specialist subject knowledge, and their knowledge of appropriate specialist texts and other support material that can contribute to learning. Thus, we believe in, and practice, research-informed teaching.

As this is a new program, where our assessment regimes have been enhanced with greater weighting of technical/practical assessments, we do not have assessment example briefs. However, as per the sibling provisions, all assessments are co-created with our industry partners wherever relevant to ensure 'real-world' approaches are taken for students to self-reflect on the application of their theoretical and practical knowledge and skill that are occupationally aligned (as per module descriptors).

All assessments are aligned to national and institutional benchmarks for weighting, validity, accessibility, equality, diversity and inclusion as well as being deployed in a manner to not overly burden students.

Our industry partners have reviewed the assessment regimes and have given feedback accordingly (external advisor comments).

# Employer engagement Employer engagement

Please describe how employers and industry practitioners were consulted throughout the development of the qualification, including:

- the process of identifying and recruiting relevant employers
- how employers were involved in the development, review and validation of the qualification materials.

Please describe how employers and industry practitioners were consulted throughout the development of the qualification.

As a University, Staffordshire have over 50 years experience of delivering Computing and Computer Science education. We have consistently focused our activity on collaboration both with and for our

students. Our industry partners regularly co-create curriculum elements with us and share their thoughts on expectations of graduates' skills, knowledge, behaviours and capabilities. We have long standing relationships with AWS, Cisco and Microsoft where we are recognised as having vendor academy status.

With respect this new FdSc Computer Science (Technical) course, that has elements contained within from other courses and provisions, we have reached out to a wide variety of industry partners and have received testimonial and oversight feedback on this provision. We have internally verified and approved this curriculum but will finalise the formal validation upon quality mark approval. This aligns to our internal processes with respect to quality assurance and also intellectual property restrictions.

We have, however, had the curriculum reviewed and received oversight and testimonial recognition of the new HTQ pathway curriculum.

Unfortunately there are some partners who have not had capacity to get back to us before the submission deadline but if these are received we will incorporate into the framework subsequent to the DfE feedback. These partners include AWS and Ebay.

We have received feedback from Cisco, Codeweavers, Hamilton-Barnes, Ticket Master so far.

We have also included some detail of our previous (recent) collaborative relationships with industry in relation to a recent project.