

# Software and data foundation apprenticeship

## Knowledge and skills coverage document

### Information for providers

Coverage of each knowledge and skill statement must include each and every occupation it is mapped to, unless expressly stated otherwise. For instance, if skill S1 is mapped to occupation 1 and occupation 2, then the range of coverage must include elements of both 1 and 2 so the apprentice benefits from a broad experience.

Competence is to the level described by this Foundation Apprenticeship's knowledge and skills and not the often higher level of the mapped occupations. Coverage will be a blend of on and off the job learning.

### Technical knowledge

1. K1: Health, safety and security including organisational policies and procedures (OCC0505, version 1.1, K20) \*
- K2: Digital systems, infrastructure, networks, software packages and programmes (OCC0973C, version 1.2, K10)\*
2. K3: Roles and responsibilities of stakeholders (OCC0128, version 1.1, K2) (OCC0865, version 1.0, K30)
- K4: Own role and responsibilities and how they help to achieve the needs of the organisation (OCC0128, version 1.1, K2)
- K5: Documentation and systems (OCC0973A, version 1.2, K2) (OCC0973B, version 1.2, K2) (OCC0973C, version 1.2, K2)\*
- K6: Essential cyber security compliance including phishing and scams (OCC0505, version 1.1, K19)
- K7: Function and operation of the stages within the solutions life cycle (OCC0128, version 1.1, K1)\*
3. K8: User requirements, needs and priorities (OCC0128, version 1.1, K1)
4. K9: Essential solution architecture and testing (OCC0505, version 1.1, K4) (OCC0128, version 1.1, K1)\*
5. K10: Emerging technologies: automation or AI in the sector and or occupation (OCC0128, version 1.1, K17) K11: Identify types and sources of data (OCC0795, version 1.0, K1) (OCC1020A, version 1.1, K5) (OCC1020B, version 1.1, K5)\*
- K12: Essentials of safely storing and retrieving data (OCC0795, version 1.0, K1) (OCC1020A, version 1.1, K5) (OCC1020B, version 1.1, K5)\*
6. K13: Principles of data extraction, validations, formatting, collating and anonymising (OCC0795, version 1.0, K3) \*

7. K14: Fundamentals of data presentation (OCC0795, version 1.0, K4) (OCC0128, version 1.1, K23)\*
  - K15: Essentials of the software development cycle and how it connects with the user experience (OCC0128, version 1.1, K1)\*
  - K16: Software testing frameworks (OCC0128, version 1.1, K13)\*
  - K17: IT security vulnerabilities (OCC0865, version 1.0, K1)\*

## Technical skills

- S1: Comply with health and safety and security requirements (OCC0128, version 1.1, S12)
  - S2: Use of infrastructure, networks, software, packages or programmes (OCC0505, version 1.1, S8)\*
8. S3: Apply knowledge of solutions to resolve issues and support users knowing when and who to escalate to (OCC0973C, version 1.2, S15)\*
    - S4: Test performance and usability (OCC0973B, version 1.2, S21) (OCC0973C, version 1.2, S14)\*
    - S5: Apply sustainability practices in their role (Not mapped to standards)
  9. S6: Maintain documentation, systems and follow organisational process and procedures (OCC0973A, version 1.2, S8) (OCC0973B, version 1.2, S8) (OCC0973C, version 1.2, S8)\*
    - S7: Use digital technologies to support daily work activities (OCC1020A, version 1.1, S1) (OCC1020A, version 1.1, S1)\*
    - S8: Safe and ethical use of emerging technologies (OCC0973A, version 1.2, S4) (OCC0973B, version 1.2, S4) (OCC0973C, version 1.2, S4)\*
    - S9: Format, present and save data (OCC0795, version 1.0, S4)\*
    - S10: Support to store, retrieve and communicate data (OCC0795, version 1.0, S12)\*
    - S11: Review data sets to ensure accuracy (OCC0795, version 1.0, S8)\*
    - S12: Write or source simple code for software requirements (OCC0128, version 1.1, S1)\*
    - S13: Test simple code (OCC0128, version 1.1, S5)\*