



**Institute for Apprenticeships
& Technical Education**

BUILDING SERVICES ENGINEER

Key information

- Proposal approved
- Occupational standard approved
- End-point assessment plan approved

Reference: ST0372

Level: 6

Degree: integrated degree

Typical duration to gateway: 60 months

Typical EPA period: 8 months

Route: Construction and the built environment

Date updated: 11/12/2023

Lars code: 198

EQA provider: Ofqual

End-point assessment plan

Introduction and overview

This document explains the requirements for end-point assessment (EPA) for the building services engineer degree-apprenticeship. End-point assessment organisations (EPAOs) must follow this when designing and delivering the EPA.

Building services engineer apprentices, their employers and training provider should read this document.

A degree-apprenticeship awards a degree with the achievement of the apprenticeship. The degree learning outcomes must be aligned with the knowledge, skills and behaviours (KSBs) in the apprenticeship. The degree must be completed, passed and awarded alongside the building services engineer degree-apprenticeship.

The apprentice must complete their training and meet the gateway requirements before starting their EPA. The EPA will assess occupational competence.

A degree-apprenticeship must be delivered by a Higher Education Provider (HEP) that is on the apprenticeship providers and assessment register (APAR). The selected HEP must be the training provider and the EPAO. The apprentice's employer must select a HEP from this register.

If the HEP is using a credit framework, the EPA must contribute to the total credit value, and must be delivered in line with this EPA plan. However, the number of credits devoted to EPA may vary across HEP's. The recommended EPA contribution is 30 of the total credit value.

A full-time building services engineer apprentice typically spends 60 months on-programme. The apprentice must spend at least 12 months on-programme and complete the required amount of off-the-job training in line with the apprenticeship funding rules.

This EPA should then be completed within an EPA period lasting typically 8 months.

Occupational competence is outlined by the EPA grade descriptors and determined, when assessed in line with this EPA plan, by an independent assessor who is an occupational expert and confirms the overall EPA grade.

This EPA has 2 assessment methods.

Assessment method 1 - project: technical report and presentation with questioning:

- fail
- pass
- distinction

Assessment method 2 - professional discussion underpinned by a portfolio of evidence:

- fail
- pass
- distinction

The result from each assessment method is combined to decide the overall degree-apprenticeship grade. The following grades are available for the degree-apprenticeship:

- fail
- pass
- distinction

EPA summary table

<p>On-programme - typically 60 months</p>	<p>The apprentice must:</p> <ul style="list-style-type: none"> • complete training to develop the knowledge, skills and behaviours (KSBs) outlined in this degree-apprenticeship's standard • complete training towards English and mathematics qualifications in line with the apprenticeship funding rules • compile a portfolio of evidence • work towards all required elements of the building services engineer degree-apprenticeship except undertaking the EPA. <p>The qualification required is:</p> <p>Building services engineering degree accredited by the Engineering Council</p>
<p>End-point assessment gateway</p>	<p>The apprentice's employer must be content that the apprentice has attained sufficient KSBs to complete the degree-apprenticeship.</p> <p>The apprentice must:</p> <ul style="list-style-type: none"> • confirm they are ready to take the EPA • have achieved English and mathematics qualifications in line with the apprenticeship funding rules • have completed and passed all required elements of the building services engineer degree-apprenticeship except the EPA <p>For the professional discussion underpinned by a portfolio of evidence, the apprentice must submit a portfolio of evidence.</p> <p>Gateway evidence must be submitted to the EPAO, along with any organisation specific policies and procedures requested by the EPAO.</p>
<p>End-point assessment - typically 8 months</p>	<p>The grades available for each assessment method are below</p> <p>Project: technical report and presentation with questioning:</p>

	<ul style="list-style-type: none"> • fail • pass • distinction <p>Professional discussion underpinned by a portfolio of evidence:</p> <ul style="list-style-type: none"> • fail • pass • distinction <p>Overall EPA and degree-apprenticeship can be graded:</p> <ul style="list-style-type: none"> • fail • pass • distinction
Professional recognition	<p>This degree-apprenticeship aligns with:</p> <ul style="list-style-type: none"> • Engineering Council in partnership with The Chartered Institution of Building Services Engineers for Incorporated Engineer (IEng)
Re-sits and re-takes	<ul style="list-style-type: none"> • re-take and re-sit grade cap: pass • re-sit timeframe: typically 4 months • re-take timeframe: typically 6 months

Duration of end-point assessment period

The EPA is taken in the EPA period. The EPA period starts when the EPAO confirms the gateway requirements have been met and is typically 8 months.

The EPAO should confirm the gateway requirements have been met and start the EPA as quickly as possible.

EPA gateway

The apprentice's employer must be content that the apprentice is occupationally competent. That is, they are deemed to be working at or above the level set out in the apprenticeship standard

and ready to undertake the EPA. The employer may take advice from the apprentice's training provider, but the employer must make the decision. The apprentice will then enter the gateway.

The apprentice must meet the gateway requirements before starting their EPA.

They must:

- confirm they are ready to take the EPA
- have achieved English and mathematics qualifications in line with the apprenticeship funding rules
- have completed and passed all required elements of the Building services engineering degree accredited by the Engineering Council degree-apprenticeship except the EPA
- submit a portfolio of evidence for the professional discussion underpinned by a portfolio of evidence

Portfolio of evidence requirements:

The apprentice must compile a portfolio of evidence during the on-programme period of the apprenticeship. It should only contain evidence related to the KSBs that will be assessed by the professional discussion. It will typically contain 15 discrete pieces of evidence. Evidence must be mapped against the KSBs. Evidence may be used to demonstrate more than one KSB; a qualitative as opposed to quantitative approach is suggested.

Evidence sources may include:

- workplace documentation and records
- workplace policies and procedures
- witness statements
- annotated photographs
- video clips with a maximum total duration of 10 minutes; the apprentice must be in view and identifiable

This is not a definitive list; other evidence sources can be included.

The portfolio of evidence should not include reflective accounts or any methods of self-assessment. Any employer contributions should focus on direct observation of performance, for example, witness statements, rather than opinions. The evidence provided should be valid and attributable to the apprentice; the portfolio of evidence should contain a statement from the employer and apprentice confirming this.

The EPAO should not assess the portfolio of evidence directly as it underpins the discussion. The independent assessor should review the portfolio of evidence to prepare questions for the discussion. They are not required to provide feedback after this review.

Gateway evidence must be submitted to the EPAO, along with any organisation specific policies and procedures requested by the EPAO.

Order of assessment methods

The assessment methods must be delivered in the following order:

The project: technical report and presentation with questioning must be taken and passed before the professional discussion can take place.

The rationale is to comply with Engineering Council regulations.

Project: technical report and presentation with questioning

Overview

A project involves the apprentice completing a significant and defined piece of work that has a real business application and benefit. The project must meet the needs of the employer's business and be relevant to the apprentice's occupation and apprenticeship.

This assessment method has 2 components:

- project with a project output
- presentation with questions and answers

Together, these components give the apprentice the opportunity to demonstrate the KSBs mapped to this assessment method. They are assessed by an independent assessor.

Rationale

- it is a holistic assessment method, allowing the apprentice to demonstrate KSBs in an integrated way
- it allows for a range of building services engineering activities to be demonstrated
- it provides a cost-effective assessment, as it minimises independent assessor time and makes use of the apprentice's employer's workplace, equipment and resources, and should contribute to workplace productivity.

Delivery

The apprentice must complete a project based on any of the following:

- a specific problem;
- a recurring issue; or
- an idea or opportunity.

Apprentices will undertake the project after they have passed the gateway. The project will typically take up to 300 hours over a period of a maximum of 6 working months, producing a technical report that appropriately covers all of the KSBs assigned to this method of assessment.

The apprentice should complete their technical project report unaided. When the technical project report is submitted, the apprentice and their employer must verify that the submitted project is the apprentice's own work.

The technical project report will be reviewed and assessed by two independent assessors.

To allow the apprentice to apply for professional registration on completion of the apprenticeship, two independent assessors must holistically assess all components of the technical project, in-line with the independent assessor requirements set out in this plan. They will have equal responsibility in grading the assessment. The use of two independent assessors will enable the provision of balance to assessment, to bring in greater breadth and depth of technical expertise to questioning and discussion with the apprentice, elucidating more accurate grading decisions.

In the event that the two independent assessors cannot agree on whether to grade the technical project report and presentation with a pass, fail or distinction, the EPAO is required to moderate in accordance with their moderation procedures. The EPAO will then make the final decision on the grade to award based on the assessment evidence presented.

To ensure the project allows the apprentice to meet the KSBs mapped to this assessment method to the highest available grade, the EPAO must sign-off the project's title and scope at the gateway to confirm it is suitable. The EPAO must refer to the grading descriptors to ensure that projects are pitched appropriately.

The project output must be in the form of a report and presentation.

The apprentice must start the project after the gateway. The employer should ensure the apprentice has the time and resources, within the project period, to plan and complete their project.

The apprentice may work as part of a team to complete the project, which could include internal colleagues or technical experts. The apprentice must however, complete their project report and presentation unaided and they must be reflective of their own role and contribution. The apprentice and their employer must confirm this when the report and any presentation materials are submitted.

Component 1: Project report

The report must include at least:

- an executive summary (or abstract)
- an introduction
- the scope of the project (including key performance indicators, aims and objectives)
- a project plan
- research outcomes
- data analysis outcomes
- project outcomes
- discussion of findings
- recommendations and conclusions
- references
- appendix containing mapping of KSBs to the report.

The project report must have a word count of 10000 words. A tolerance of 10% above or below is allowed at the apprentice's discretion. Appendices, references and diagrams are not included in this total. The apprentice must produce and include a mapping in an appendix, showing how the report evidences the KSBs mapped to this assessment method.

The apprentice must complete and submit the report and any presentation materials to the EPAO by the end of week 24 of the EPA period.

Component 2: Presentation with questions

The presentation with questions must be structured to give the apprentice the opportunity to demonstrate the KSBs mapped to this assessment method to the highest available grade.

The apprentice must prepare and deliver a presentation to an independent assessor. After the presentation, the independent assessor must ask the apprentice questions about their project, report and presentation.

The presentation should cover:

- an overview of the project
- the project scope (including key performance indicators)
- summary of actions undertaken by the apprentice
- project outcomes and how these were achieved

The presentation with questions must last 50 minutes. This will typically include a presentation of 20 minutes and questioning lasting 30 minutes. The independent assessor must use the full time available for questioning. The independent assessor can increase the time of the presentation and questioning by up to 10%. This time is to allow the apprentice to complete their last point or respond to a question if necessary.

The independent assessor must ask at least 5 questions. They must use the questions from the EPAO's question bank or create their own questions in line with the EPAO's training. Follow up questions are allowed where clarification is required.

The purpose of the independent assessor's questions is:

- to verify that the activity was completed by the apprentice
- to seek clarification where required
- to assess those KSBs that the apprentice did not have the opportunity to demonstrate with the report, although these should be kept to a minimum
- to assess level of competence against the grading descriptors

The apprentice must submit any presentation materials to the EPAO at the same time as the report - by the end of week 24 of the EPA period. The apprentice must notify the EPAO, at that point, of any technical requirements for the presentation.

During the presentation, the apprentice must have access to:

- commonly used presentation software;
- flip chart;

- work products;
- videos or other media clips;
- interactive demonstrations;
- notes; and
- computer.

The independent assessor must have at least 3 weeks to review the project report and any presentation materials, to allow them to prepare questions.

The apprentice must be given at least 3 weeks' notice of the presentation with questions.

Assessment decision

The independent assessor must make the grading decision. They must assess the project components holistically when deciding the grade.

The independent assessor must keep accurate records of the assessment. They must record:

- the KSBs demonstrated in the report and presentation with questions
- the apprentice's answers to questions
- the grade achieved

Assessment location

The presentation with questions must take place in a suitable venue selected by the EPAO for example, the EPAO's or employer's premises. It should take place in a quiet room, free from distractions and influence.

The presentation with questions can be conducted by video conferencing. The EPAO must have processes in place to verify the identity of the apprentice and ensure the apprentice is not being aided.

Question and resource development

The EPAO must develop a purpose-built assessment specification and question bank. It is recommended this is done in consultation with employers of this occupation. The EPAO must maintain the security and confidentiality of EPA materials when consulting with employers. The assessment specification and question bank must be reviewed at least once a year to ensure they remain fit-for-purpose.

The assessment specification must be relevant to the occupation and demonstrate how to assess the KSBs mapped to this assessment method. The EPAO must ensure that questions are refined and developed to a high standard. The questions must be unpredictable. A question bank of sufficient size will support this.

The EPAO must ensure that the apprentice has a different set of questions in the case of re-sits or re-takes.

EPAO must produce the following materials to support the project:

- independent assessor EPA materials which include:

- training materials
 - administration materials
 - moderation and standardisation materials
 - guidance materials
 - grading guidance
 - question bank
- EPA guidance for the apprentice and the employer

The EPAO must ensure that the EPA materials are subject to quality assurance procedures including standardisation and moderation.

Professional discussion underpinned by a portfolio of evidence

Overview

In the professional discussion, an independent assessor and apprentice have a formal two-way conversation. It gives the apprentice the opportunity to demonstrate the KSBs mapped to this assessment method.

The apprentice can refer to and illustrate their answers with evidence from their portfolio of evidence.

Rationale

- it allows for the assessment of KSBs that take place over a long period of time
- it allows for a broad set of KSBs to be evidence during the post-gateway period
- it tests knowledge, skills and behaviour holistically
- it can produce something that is of genuine business benefit to the apprentice's employer
- it allows the apprentice to directly demonstrate knowledge and skills relating to communication and presentation
- it allows for the presentation of evidence and testing of responses where there are a range of potential answers
- it can be conducted remotely, potentially reducing cost.

Delivery

The professional discussion must be structured to give the apprentice the opportunity to demonstrate the KSBs mapped to this assessment method to the highest available grade.

An independent assessor must conduct and assess the professional discussion.

The purpose of the assessors' questions will be to assess the following themes:

- design, technology and models in building services engineering information
- project management and safe systems of work
- roles, responsibilities and engagement with others

- personal and professional practice.

Two independent assessors conduct and assess the professional discussion.

To allow the apprentice to apply for professional registration on completion of the apprenticeship, two independent assessors must holistically assess all assessment methods, in line with the independent assessor requirements set out in this plan. They will have equal responsibility in grading the assessment. The use of two independent assessors will enable the provision of balance to assessment, to bring in greater breadth and depth of technical expertise to questioning and discussion with the apprentice, elucidating more accurate grading decisions.

In the event that the two independent assessors cannot agree on whether to grade the technical project and presentation with a pass, fail or distinction, the EPAO is required to moderate in accordance with their moderation procedures. The EPAO will then make the final decision on the grade to award based on the assessment evidence presented.

The EPAO must give an apprentice 3 weeks' notice of the professional discussion.

The independent assessor must have at least 3 weeks to review the supporting documentation.

The apprentice must have access to their portfolio of evidence during the professional discussion.

The apprentice can refer to and illustrate their answers with evidence from their portfolio of evidence however, the portfolio of evidence is not directly assessed.

The professional discussion must last for 60 minutes. The independent assessor can increase the time of the professional discussion by up to 10%. This time is to allow the apprentice to respond to a question if necessary.

The independent assessor must ask at least 8 questions. The independent assessor must use the questions from the EPAO's question bank. Follow-up questions are allowed where clarification is required.

The independent assessor must make the grading decision.

The independent assessor must keep accurate records of the assessment. They must record:

- the apprentice's answers to questions
- the KSBs demonstrated in answers to questions
- the grade achieved

Assessment location

The professional discussion must take place in a suitable venue selected by the EPAO for example, the EPAO's or employer's premises.

The professional discussion can be conducted by video conferencing. The EPAO must have processes in place to verify the identity of the apprentice and ensure the apprentice is not being aided.

The professional discussion should take place in a quiet room, free from distractions and influence.

Question and resource development

The EPAO must develop a purpose-built assessment specification and question bank. It is recommended this is done in consultation with employers of this occupation. The EPAO must maintain the security and confidentiality of EPA materials when consulting with employers. The assessment specification and question bank must be reviewed at least once a year to ensure they remain fit-for-purpose.

The assessment specification must be relevant to the occupation and demonstrate how to assess the KSBs mapped to this assessment method. The EPAO must ensure that questions are refined and developed to a high standard. The questions must be unpredictable. A question bank of sufficient size will support this.

The EPAO must ensure that the apprentice has a different set of questions in the case of re-sits or re-takes.

The EPAO must produce the following materials to support the professional discussion underpinned by a portfolio of evidence:

- independent assessor assessment materials which include:
 - training materials
 - administration materials
 - moderation and standardisation materials
 - guidance materials
 - grading guidance
 - question bank
- EPA guidance for the apprentice and the employer

The EPAO must ensure that the EPA materials are subject to quality assurance procedures including standardisation and moderation.

Grading

Project: technical report and presentation with questioning

Fail - does not meet pass criteria

THEME KSBS	PASS APPRENTICES MUST DEMONSTRATE ALL OF THE PASS DESCRIPTORS	DISTINCTION APPRENTICES MUST DEMONSTRATE ALL OF THE PASS DESCRIPTORS AND ALL OF THE DISTINCTION DESCRIPTORS
Building services engineering technical knowledge and techniques K1 K2 S1 S2	<p>Applies engineering principles, using underpinning theoretical and technical scientific, mathematical and statistical knowledge, to present a solution to the building services engineering problem outlined in the project. (K1, S1)</p> <p>Applies building services engineering techniques, procedures and methods including measuring and testing, designing, installing, commissioning, maintaining or operating building services engineering components and systems; outlines how continuous improvement would support improved performance; and reviews, analyses and evaluates the results of their actions in the project. (K2, S2)</p>	<p>Critically evaluates the effectiveness of the methods, procedures and techniques used, to solve the building services engineering problem in the project (K2, S2)</p>
Data and information handling, collection, analysis and evaluation K3 K4 K5 S3 S4 S5 B4	<p>Uses mathematical, statistical and data interpretation tools and techniques, analytical and computational methods, and an integrated or systems-based approach, to interpret, solve and evaluate the building services engineering problem outlined in the project. (K3, S3)</p> <p>Identifies, interprets and compares information relating to the properties of materials, components, parts and processes to select those required to solve the building services engineering problem with attention to detail, accuracy and diligently adopting a continuous improvement approach</p>	<p>Critically evaluates the use of mathematical, statistical and data interpretation tools and techniques adopted to solve the problem outlined in the project. (S3)</p>

	<p>to the problem outlined in the project. (K4, S4, B4)</p> <p>Researches, collects, selects and uses data and information, including technical literature, to address, analyse, and evaluate the building services engineering problem outlined in the project. (K5, S5)</p>	
<p>Planning resources and project management K14 S15 B2</p>	<p>Makes decisions and exercises sound independent engineering judgement within their limits of authority to plan and manage project resources, equipment and technology to specifications, timescales and budget, escalating when required to mitigate the impact to the cost, quality, safety, security, environment, commercial and legal requirements of the project. (K14, S15, B2)</p>	<p>Evaluates the impact of their decision making on the project requirements. (S15, B2)</p>
<p>Industry standards, policies, and regulatory requirements K9 K12 S6 S11</p>	<p>Produces building services engineering technical solutions in accordance with relevant industry standards, policies, codes of practice, regulations, and legislation. (K9, S6)</p> <p>Applies principles of sustainable development to the building services engineering project, and evaluates the impact of the sustainable choices made on the lifecycle of the project in line with UN Sustainable Development Goals (UNSDGs), net-zero carbon emissions, environmental policies and legislation, the environmental protection and the climate change acts. (K12, S11)</p>	<p>Evaluates the impact of industry standards, policies, regulations, legislation and codes of practice on their project solution. (K9, S6)</p>
<p>Communication K15 S18</p>	<p>Uses written and verbal communication techniques and methods incorporating appropriate engineering terminology and</p>	<p>N/A</p>

	conventions to meet the needs of the audience. (K15, S18)	
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Professional discussion underpinned by a portfolio of evidence

Fail - does not meet pass criteria

THEME KSBS	PASS APPRENTICES MUST DEMONSTRATE ALL OF THE PASS DESCRIPTORS	DISTINCTION APPRENTICES MUST DEMONSTRATE ALL OF THE PASS DESCRIPTORS AND ALL OF THE DISTINCTION DESCRIPTORS
Design, technology and models in building services engineering information K6 K7 K8 S7 S8	<p>Explains the principles and control processes used, including the factors, legislation, codes of practice and industry standards faced when contributing to the design, development and implementation, and evaluation, of building services engineering solutions. (K6, S8)</p> <p>Explains how they use technical drawings, designs, and models, analytical and computer-based techniques to produce, interpret, and evaluate building services engineering solutions, and the limitations of the techniques used. (K7, S7)</p> <p>Explains the use and limitations of digital modelling techniques, such as Building Information Modelling (BIM), within building services engineering solutions. (K8)</p>	Evaluates the impact digital modelling techniques have on building engineering solutions. (K8)
Project management and safe systems of work K10 K11 K13 S9 S10 S12 S13 S14 B1	<p>Explains how they apply project management techniques to identify, measure, record, and report progress, show how performance criteria have been met in projects, and how they assess and report on quality using management and assurance systems and continuous improvement processes. (K13, S13, S14)</p> <p>Describes how they manage and comply with statutory health and safety regulations and procedures, codes of practice and welfare policies including Construction Design Management (CDM) in their building services engineering role.</p>	Critically evaluates the impact of the chosen project management technique on their project. (K13, S13)

	<p>Explains how they contribute to improvements in safe systems of work (within their own area of responsibility) and encourage others to comply. (K10, S9, B1)</p> <p>Describes how they complete risk assessments to identify, evaluate, manage and mitigate hazards and risks in line with organisational procedures and regulatory requirements in the building services engineering sector. (K11, S10)</p> <p>Describes how they manage engineering activities that contribute to sustainable development and the United Nations' Sustainable Development Goals (UNSDGs). (S12)</p>	
<p>Roles, responsibilities, and engagement with others K16 K17 K18 K19 K20 S16 S17 S19 B3 B5</p>	<p>Describes the roles and responsibilities found in their organisation and the wider building services engineering sector, and the methods used to monitor and manage their own performance at work, and the input of others, describing how they adapt to, and communicate, changing demands. (K16, S16)</p> <p>Describes how they apply teamworking and collaboration principles, to deliver building services engineering activities, individually and as part of a team (K17, S19, B3)</p> <p>Describes the relationships between organisations and personnel in the building services engineering sector and how the relationships are impacted by commercial and legal matters. (K18)</p> <p>Explains how they comply with industry codes of practice and organisational equity, diversity and inclusion policies. (S17)</p>	<p>Critically evaluates the impact of their individual contribution and collaborative working approaches used to deliver building services engineering activities. (K17, S19)</p>

	<p>Describes the importance and benefits of, and how they promote, equity, diversity and inclusion through their responsibilities at work, and how they maintain professional and ethical working relationships with internal, external and connected stakeholders. (K19, B5)</p> <p>Describes the issues, symptoms and warning signs related to stress, anxiety and depression, and how to access sources of help and relevant resources. (K20)</p>	
<p>Personal and professional practice K21 K22 S20 S21 B6</p>	<p>Describes how they take responsibility for planning, undertaking and reviewing their own professional competence, and how they seek opportunities to enhance their knowledge, skills, and experience, and update and review their continuing professional development (CPD).</p> <p>Explains how they support others to develop their professional competence. (K22, S21, B6)</p> <p>Explains how they apply ethical principles and identify and analyse ethical concerns and implications to legal, civil, reputational and professional risk, to make reasoned choices in their role. (K21, S20)</p>	<p>Evaluates how they use their own performance to inform and improve their own or others' professional competence. (K22, S21, B6)</p> <p>Critically evaluates the legal, civil and reputational implications of unethical behaviour and practice within the building services engineering sector. (K21, S20)</p>

Overall EPA grading

Performance in the EPA determines the overall grade of:

- fail
- pass
- distinction

Two independent assessors with equal responsibility will grade the project: technical report and presentation with questioning and professional discussion underpinned by a portfolio of evidence in line with this EPA plan.

The EPAO must combine the individual assessment method grades to determine the overall EPA grade.

If the apprentice fails one assessment method or more, they will be awarded an overall fail.

To achieve an overall pass, the apprentice must achieve at least a pass in all the assessment methods. In order to achieve an overall distinction grade, apprentices must achieve a distinction in both assessment methods.

Grades from individual assessment methods must be combined in the following way to determine the grade of the EPA overall.

Additional assessors can contribute to grading decisions in line with this EPA plan, on the following end-point assessment methods:

- Project: technical report and presentation with questioning
- Professional discussion underpinned by a portfolio of evidence

PROJECT: TECHNICAL REPORT AND PRESENTATION WITH QUESTIONING	PROFESSIONAL DISCUSSION UNDERPINNED BY A PORTFOLIO OF EVIDENCE	OVERALL GRADING
Fail	Any grade	Fail
Any grade	Fail	Fail
Pass	Pass	Pass
Distinction	Pass	Pass
Pass	Distinction	Pass
Distinction	Distinction	Distinction

Re-sits and re-takes

If the apprentice fails one assessment method or more, they can take a re-sit or a re-take at their employer's discretion. The apprentice's employer needs to agree that a re-sit or re-take is appropriate. A re-sit does not need further learning, whereas a re-take does. The apprentice should have a supportive action plan to prepare for a re-sit or a re-take.

The employer and the EPAO should agree the timescale for a re-sit or re-take. A re-sit is typically taken within 4 months of the EPA outcome notification. The timescale for a re-take is dependent on how much re-training is required and is typically taken within 6 months of the EPA outcome notification.

If the apprentice fails the project assessment method, they must amend the project output in line with the independent assessor's feedback. The apprentice will be given 6 weeks to rework and submit the amended report.

Failed assessment methods must be re-sat or re-taken within a 6-month period from the EPA outcome notification, otherwise the entire EPA will need to be re-sat or re-taken in full.

Re-sits and re-takes are not offered to an apprentice wishing to move from pass to a higher grade.

The apprentice will get a maximum EPA grade of if pass they need to re-sit or re-take one or more assessment methods, unless the EPAO determines there are exceptional circumstances.

Roles and responsibilities

ROLES	RESPONSIBILITIES
Apprentice	<p>As a minimum, the apprentice should:</p> <ul style="list-style-type: none"> • complete on-programme training to meet the KSBs as outlined in the apprenticeship standard for a minimum of 12 months • complete the required amount of off-the-job training specified by the apprenticeship funding rules as arranged by the employer and training provider • understand the purpose and importance of EPA • prepare for and undertake the EPA including meeting all gateway requirements • ensure that all supporting evidence required at the gateway is submitted in accordance with this EPA plan
Employer	<p>As a minimum, the apprentice's employer must:</p> <ul style="list-style-type: none"> • select the EPAO (and therefore training provider) • work with the training provider (where applicable) to support the apprentice in the workplace and to provide the opportunities for the apprentice to develop the KSBs • arrange and support off-the-job training to be undertaken by the apprentice • decide when the apprentice is working at or above the the occupational competence and is ready for EPA • ensure the apprentice is prepared for the EPA • ensure that all supporting evidence required at the gateway is submitted in accordance with this EPA plan • confirm arrangements with the EPAO for the EPA (who, when, where) in a timely manner • provide access to any employer-specific documentation as required, for example company policies) • ensure that the EPA is scheduled with the EPAO for a date and time which allows appropriate opportunity for the apprentice to meet the KSBs. • ensure the apprentice is given sufficient time away from regular duties to prepare for, and complete the EPA • ensure that any required supervision during the EPA period, as stated within this EPA plan, is in place • ensure the apprentice has access to the resources used to fulfil their role and carry out the EPA for workplace based assessments <p>remain independent from the delivery of the EPA</p>

	<ul style="list-style-type: none"> • pass the certificate to the apprentice upon receipt from the EPAO
EPAO - HEP	<p>As a minimum, the EPAO (HEP) must:</p> <ul style="list-style-type: none"> • conform to the requirements of the apprenticeship provider and assessment register • conform to the requirements of this EPA plan and deliver its requirements in a timely manner • conform to the requirements of the external quality assurance provider (EQAP) • understand the degree-apprenticeship, including the apprenticeship standard, EPA plan and funding • make all necessary contractual arrangements, including agreeing the price of the EPA • develop and produce assessment materials including specifications and marking materials (for example mark schemes, practice materials, training material) • maintain and apply a policy for the declaration and management of conflict of interests and independence which ensures, as a minimum, no personal benefit or detriment is received by those delivering the EPA or from the result of an assessment and covers: <ul style="list-style-type: none"> • apprentices • employers • assessors • the HEP's role as a training provider • any other roles involved in delivery or grading of the EPA • have quality assurance systems and procedures that ensure fair, reliable and consistent assessment and maintain records of IQA activity for external quality assurance (EQA) purposes • appoint independent, competent and suitably qualified assessors in line with the requirements of this EPA plan • where required to facilitate the EPA, appoint administrators, invigilators and any other roles • deliver induction, initial and on-going training for all assessors, and if used administrators and invigilators and any other roles involved in delivery or grading of the EPA specified within this EPA plan. This should include how to record the rationale and evidence for grading decisions where required

- standardise all assessors, before allowing them to deliver EPAs and:
 - when the EPA is updated
 - at least once a year
 - moderate their decisions once EPAs have begun
- develop and produce assessment materials including specifications and marking materials (for example mark schemes, practice materials, training material)
- maintain and apply a policy for the declaration and management of conflict of interests and independence which ensures, as a minimum, no personal benefit or detriment is received by those delivering the EPA or from the result of an assessment and covers:
- monitor the performance of all assessors and provide re-training where necessary
- develop and provide assessment recording documentation to ensure a clear and auditable process is in place for providing assessment decisions and feedback to all relevant stakeholders
- use language in the development and delivery of the EPA that is appropriate to the level of the degree-apprenticeship
- arrange for the EPA to take place in a timely manner, in consultation with the employer
- provide information, advice and guidance documentation to enable apprentices, employers and training providers to prepare for the EPA
- confirm all gateway requirements have been met
- host and facilitate the EPA or make suitable alternative arrangements
- maintain the security of the EPA including, but not limited to, verifying the identity of the apprentice, invigilation, security of materials
- where the EPA plan permits assessment away from the workplace, ensure that the apprentice has access to the required resources and liaise with the employer to agree this if necessary
- confirm the overall EPA grade
- arrange the certification of the degree-apprenticeship
- conduct appeals where required, according to the EPAO's appeals procedure

<p>Training provider - HEP</p>	<p>As a minimum, the training provider (HEP) must:</p> <ul style="list-style-type: none"> • conform to the requirements of the apprenticeship provider and assessment register • ensure procedures are in place to mitigate against any conflict of interest • work with the employer and support the apprentice during the off-the-job training to provide the opportunities to develop the knowledge, skills and behaviours as outlined in the apprenticeship standard • deliver training to apprentices as outlined in their learner agreement • monitor the apprentice's progress during any training provider led on-programme learning • ensure the apprentice is prepared for the EPA • advise the employer, upon request, on the apprentice's readiness for EPA • ensure that all supporting evidence required at the gateway is submitted in accordance with this EPA plan
<p>Independent assessor</p>	<p>As a minimum, an independent assessor must:</p> <ul style="list-style-type: none"> • be independent, with no conflict of interest with the apprentice, their employer or training provider, specifically, they must not receive a personal benefit or detriment from the result of the assessment • not be employed by the same organisation as the apprentice or drawn from an organisation on IfATE's directory of professional and employer-led bodies that supports external quality assurance. • be current and active in the occupation, for example be sourced from the industry or a professional body • have, maintain and be able to evidence up-to-date knowledge and expertise of the occupation • have authority to represent the professional body where the EPA is acting as the professional body's assessment process (if necessary and permitted in the EPA plan) • have the competence to assess the EPA and meet the requirements of the IQA section of this EPA plan • understand the degree-apprenticeship (occupational standard and EPA plan) • attend induction and standardisation events before they conduct an EPA for the first time, when the EPA is updated, and

	<p>at least once a year</p> <ul style="list-style-type: none"> • use language in the delivery of the EPA that is appropriate to the level of the degree-apprenticeship • work with other personnel, including additional assessors where used, in the preparation and delivery of assessment methods • conduct the EPA to assess the apprentice against the KSBs and in accordance with the EPA plan • make all final grading decisions on an apprentice's occupational competence in accordance with grading descriptors in this EPA plan • if an assessor panel is used, the independent assessor must chair and make final grading decisions • record and report all assessment outcome decisions for each apprentice • comply with the IQA requirements of the EPAO • comply with external quality assurance (EQA) requirements
External examiner	<p>As a minimum, the external examiner must:</p> <ul style="list-style-type: none"> • confirm the EPA has been delivered in accordance with the EPA plan • accept, and therefore not change, the EPA grading decisions made by the independent assessor • comply with the requirements of the EPA plan and IfATE policies • comply with the requirements, policies, and procedures of the EQA provider • be independent of the apprentice, and the employing organisation who are involved in delivering the degree-apprenticeship • be independent of the delivery and awarding of the EPA • not have been involved in the teaching or on-programme assessment of the apprentice

Reasonable adjustments

The EPAO must have reasonable adjustments arrangements for the EPA.

This should include:

- how an apprentice qualifies for a reasonable adjustment

- what reasonable adjustments may be made

Adjustments must maintain the validity, reliability and integrity of the EPA as outlined in this EPA plan.

Special considerations

The EPAO must have special consideration arrangements for the EPA.

This should include:

- how an apprentice qualifies for a special consideration
- what special considerations will be given

Special considerations must maintain the validity, reliability and integrity of the EPA as outlined in this EPA plan.

Internal quality assurance

Internal quality assurance refers to the strategies, policies and procedures that EPAOs must have in place to ensure valid, consistent and reliable end-point assessment decisions.

EPAOs for this EPA must adhere to all requirements within the roles and responsibilities table and:

- appoint independent assessors who also:
 - have relevant experience of the occupation to at least occupational level 6 gained in the last 2 years or significant experience of the occupation or sector
 - have professional body membership with:
 - Engineering Council:
 - must have professional body membership with a relevant Engineering Council professional engineering institution (PEI) at IEng or CEng level;
 - are active, trained and recognised by an Engineering Council licenced professional engineering institution as a professional reviewer (at IEng and above); and
 - are professionally active and maintain their CPD annually.

Value for money

Affordability of the EPA will be aided by using at least some of the following:

- completing applicable assessment methods online, for example computer-based assessment
- utilising digital remote platforms to conduct applicable assessment methods

Professional recognition

This degree-apprenticeship aligns with:

- Engineering Council in partnership with The Chartered Institution of Building Services Engineers for Incorporated Engineer (IEng)

KSB mapping table

KNOWLEDGE	ASSESSMENT METHODS
<p>K1 Engineering principles, underpinned by theoretical and technical scientific, mathematical and statistical knowledge.</p>	Project: technical report and presentation with questioning
<p>K2 Engineering techniques, procedures and methods used to measure, test and analyse the performance of building services engineering components and systems.</p>	Project: technical report and presentation with questioning
<p>K3 Analytical tools and techniques to support integrated or systems-based approaches to problem solving.</p>	Project: technical report and presentation with questioning
<p>K4 Properties of, identification and selection criteria for materials, components or parts, and processes used in building services engineering.</p>	Project: technical report and presentation with questioning
<p>K5 Techniques and methods used to research and collect data and technical information.</p>	Project: technical report and presentation with questioning
<p>K6 Building services engineering design principles and control processes, including the factors that affect design, and the compliance with building safety and health and safety legislation, codes of practice and industry standards.</p>	Professional discussion underpinned by a portfolio of evidence
<p>K7 Technical drawings, designs, and analytical and computer-based techniques.</p>	Professional discussion underpinned by a portfolio of evidence
<p>K8 The use and limitations of computational and digital models, including Building Information Modelling (BIM).</p>	Professional discussion underpinned by a portfolio of evidence
<p>K9 Industry policies, standards, regulations and legislation, and codes of practice, including Building Safety Act 2022 or BSI Flex 8670.</p>	Project: technical report and presentation with questioning
<p>K10</p>	Professional discussion underpinned by a

Statutory health, safety and welfare legislation and regulations including Health and Safety at Work Act 1974 and Construction (Design and Management) (CDM) and policies and procedures to enable safe systems of work.	portfolio of evidence
K11 Hazard and risk assessment, evaluation, and mitigation processes, in the building services engineering environment.	Professional discussion underpinned by a portfolio of evidence
K12 Principles of sustainable development and their impact on the lifecycle of building services engineering solutions, including United Nations Sustainable Development Goals (UNSDG) and net-zero carbon emissions, environmental policies and legislations, the environmental protection and the climate change acts.	Project: technical report and presentation with questioning
K13 Project management techniques, including quality and information management and assurance systems and the need and use of continuous improvement processes.	Professional discussion underpinned by a portfolio of evidence
K14 Methods for planning, managing and resourcing building services engineering projects, and the impact on cost, quality, safety, security, environment, commercial and legal matters.	Project: technical report and presentation with questioning
K15 Methods of communication and when to use them, using appropriate engineering terminology and conventions.	Project: technical report and presentation with questioning
K16 Roles and responsibilities within their organisation and the wider building services engineering sector.	Professional discussion underpinned by a portfolio of evidence
K17 Principles of teamwork and collaboration.	Professional discussion underpinned by a portfolio of evidence
K18 Relationships between organisations, customers, partners and suppliers in the building services engineering sector, including how these are affected by relevant commercial and legal matters.	Professional discussion underpinned by a portfolio of evidence

K19 Equality, diversity and inclusion, including the Equality Act, their responsibilities, its benefits and importance.	Professional discussion underpinned by a portfolio of evidence
K20 Awareness of issues and common symptoms and warning signs of stress, anxiety and depression, plus where to go for help and the resources available.	Professional discussion underpinned by a portfolio of evidence
K21 Ethical principles and practices, including the implications to legal, civil, reputational and professional risk.	Professional discussion underpinned by a portfolio of evidence
K22 Methods to maintain and enhance professional competence and technical knowledge (CPD).	Professional discussion underpinned by a portfolio of evidence

SKILL	ASSESSMENT METHODS
<p>S1 Apply engineering principles to solve broadly defined engineering problems and contribute to continuous improvement: scientific, theoretical, and technical principles.</p>	Project: technical report and presentation with questioning
<p>S2 Apply building services engineering techniques, procedures and methods, review and evaluate the results, including when measuring and testing, designing, installing, commissioning, maintaining or operating building services engineering systems or improving the performance of building services engineering components and systems.</p>	Project: technical report and presentation with questioning
<p>S3 Employ mathematical, statistical and data interpretation tools, using analytical and computational methods, and apply an integrated or systems-based approach.</p>	Project: technical report and presentation with questioning
<p>S4 Identify, interpret, and compare information in relation to materials, components or parts used in building services engineering.</p>	Project: technical report and presentation with questioning
<p>S5 Research, collect, select and evaluate technical literature and other sources of data and information to address, analyse and evaluate building services engineering problems.</p>	Project: technical report and presentation with questioning
<p>S6 Produce building services engineering technical solutions in accordance with relevant industry standards, policies, codes of practice, regulations, and legislation.</p>	Project: technical report and presentation with questioning
<p>S7 Select and apply computational and analytical techniques to model building services engineering problems, recognising the limitations of the techniques employed.</p>	Professional discussion underpinned by a portfolio of evidence
<p>S8 Contribute to the design, development and implementation of building services engineering solutions, and evaluate their effectiveness in the context of the whole project life cycle.</p>	Professional discussion underpinned by a portfolio of evidence

<p>S9 Manage and comply with statutory health, safety and welfare policies, procedures and regulation, and contribute to improvements in health, safety and welfare, within their own area of responsibility.</p>	Professional discussion underpinned by a portfolio of evidence
<p>S10 Complete risk assessments to identify, evaluate, manage and mitigate risks.</p>	Professional discussion underpinned by a portfolio of evidence
<p>S11 Apply principles of sustainable development and evaluate their effectiveness on the whole project lifecycle of building services engineering solutions.</p>	Project: technical report and presentation with questioning
<p>S12 Manage engineering activities that contribute to sustainable development and the United Nations' Sustainable Development Goals (UNSDGs).</p>	Professional discussion underpinned by a portfolio of evidence
<p>S13 Apply project management techniques, identifying, measuring, recording and reporting progress against building services engineering project performance criteria.</p>	Professional discussion underpinned by a portfolio of evidence
<p>S14 Manage quality processes and contribute to quality improvements.</p>	Professional discussion underpinned by a portfolio of evidence
<p>S15 Plans and manages resources, equipment and technology, to meet project requirements, specifications, costs and budgets and timescales, with an appreciation of statutory and commercial arrangements.</p>	Project: technical report and presentation with questioning
<p>S16 Monitor and manage individual performance, and the input of others, recognising the need to adapt to, and communicate, changing demands.</p>	Professional discussion underpinned by a portfolio of evidence
<p>S17 Comply with appropriate codes of practice and equality, diversity and inclusion (EDI) requirements.</p>	Professional discussion underpinned by a portfolio of evidence

<p>S18 Communicate in verbal and written contexts using appropriate methods for the audience. Use appropriate engineering terminology and conventions.</p>	<p>Project: technical report and presentation with questioning</p>
<p>S19 Apply teamwork and collaboration principles.</p>	<p>Professional discussion underpinned by a portfolio of evidence</p>
<p>S20 Apply ethical principles, Identifying and analysing ethical concerns and making reasoned ethical choices.</p>	<p>Professional discussion underpinned by a portfolio of evidence</p>
<p>S21 Plan, undertake and review their own professional competence, regularly updating, recording and reviewing their continuing professional development (CPD).</p>	<p>Professional discussion underpinned by a portfolio of evidence</p>

BEHAVIOUR	ASSESSMENT METHODS
<p>B1 Works to health, safety and welfare requirements, safe systems of work, industry standards, statutory regulation and legislation, policies, and codes of practice, and ensuring others do likewise.</p>	<p>Professional discussion underpinned by a portfolio of evidence</p>
<p>B2 Makes decisions, exercising sound independent engineering judgement, whilst knowing their own limits of authority and when to ask for help or to escalate.</p>	<p>Project: technical report and presentation with questioning</p>
<p>B3 Works effectively, individually and as part of a team.</p>	<p>Professional discussion underpinned by a portfolio of evidence</p>
<p>B4 Solves problems with attention to detail, accuracy, and diligence, and seeks to continually improve.</p>	<p>Project: technical report and presentation with questioning</p>
<p>B5 Promotes equality, diversity and inclusivity in the workplace, maintains professional working relationships with internal, external, and connected stakeholders, and makes reasoned ethical choices.</p>	<p>Professional discussion underpinned by a portfolio of evidence</p>
<p>B6 Takes responsibility for their own professional development, seeking opportunities to extend and enhance their knowledge, skills, and experience, and support others, in line with professional codes of conduct.</p>	<p>Professional discussion underpinned by a portfolio of evidence</p>

Mapping of KSBs to grade themes

Project: technical report and presentation with questioning

KSBS GROUPED BY THEME	KNOWLEDGE	SKILLS	BEHAVIOUR
Building services engineering technical knowledge and techniques K1 K2 S1 S2	<p>Engineering principles, underpinned by theoretical and technical scientific, mathematical and statistical knowledge. (K1)</p> <p>Engineering techniques, procedures and methods used to measure, test and analyse the performance of building services engineering components and systems. (K2)</p>	<p>Apply engineering principles to solve broadly defined engineering problems and contribute to continuous improvement: scientific, theoretical, and technical principles. (S1)</p> <p>Apply building services engineering techniques, procedures and methods, review and evaluate the results, including when measuring and testing, designing, installing, commissioning, maintaining or operating building services engineering systems or improving the performance of building services engineering components and systems. (S2)</p>	None
Data and information handling, collection, analysis and evaluation K3 K4 K5 S3 S4 S5 B4	<p>Analytical tools and techniques to support integrated or systems-based approaches to problem solving. (K3)</p> <p>Properties of, identification and selection criteria for materials, components or parts, and processes</p>	<p>Employ mathematical, statistical and data interpretation tools, using analytical and computational methods, and apply an integrated or systems-based approach. (S3)</p> <p>Identify, interpret, and compare</p>	Solves problems with attention to detail, accuracy, and diligence, and seeks to continually improve. (B4)

	<p>used in building services engineering. (K4)</p> <p>Techniques and methods used to research and collect data and technical information. (K5)</p>	<p>information in relation to materials, components or parts used in building services engineering. (S4)</p> <p>Research, collect, select and evaluate technical literature and other sources of data and information to address, analyse and evaluate building services engineering problems. (S5)</p>	
<p>Planning resources and project management</p> <p>K14 S15 B2</p>	<p>Methods for planning, managing and resourcing building services engineering projects, and the impact on cost, quality, safety, security, environment, commercial and legal matters. (K14)</p>	<p>Plans and manages resources, equipment and technology, to meet project requirements, specifications, costs and budgets and timescales, with an appreciation of statutory and commercial arrangements. (S15)</p>	<p>Makes decisions, exercising sound independent engineering judgement, whilst knowing their own limits of authority and when to ask for help or to escalate. (B2)</p>
<p>Industry standards, policies, and regulatory requirements</p> <p>K9 K12 S6 S11</p>	<p>Industry policies, standards, regulations and legislation, and codes of practice, including Building Safety Act 2022 or BSI Flex 8670. (K9)</p> <p>Principles of sustainable development and their impact on the lifecycle of building services engineering solutions, including United Nations</p>	<p>Produce building services engineering technical solutions in accordance with relevant industry standards, policies, codes of practice, regulations, and legislation. (S6)</p> <p>Apply principles of sustainable development and evaluate their effectiveness on the whole project lifecycle of building</p>	<p>None</p>

	Sustainable Development Goals (UNSDG) and net-zero carbon emissions, environmental policies and legislations, the environmental protection and the climate change acts. (K12)	services engineering solutions. (S11)	
Communication K15 S18	Methods of communication and when to use them, using appropriate engineering terminology and conventions. (K15)	Communicate in verbal and written contexts using appropriate methods for the audience. Use appropriate engineering terminology and conventions. (S18)	None

Professional discussion underpinned by a portfolio of evidence

KSBS GROUPED BY THEME	KNOWLEDGE	SKILLS	BEHAVIOUR
<p>Design, technology and models in building services engineering information K6 K7 K8 S7 S8</p>	<p>Building services engineering design principles and control processes, including the factors that affect design, and the compliance with building safety and health and safety legislation, codes of practice and industry standards. (K6)</p> <p>Technical drawings, designs, and analytical and computer-based techniques. (K7)</p> <p>The use and limitations of computational and digital models, including Building Information Modelling (BIM). (K8)</p>	<p>Select and apply computational and analytical techniques to model building services engineering problems, recognising the limitations of the techniques employed. (S7)</p> <p>Contribute to the design, development and implementation of building services engineering solutions, and evaluate their effectiveness in the context of the whole project life cycle. (S8)</p>	<p>None</p>
<p>Project management and safe systems of work K10 K11 K13 S9 S10 S12 S13 S14 B1</p>	<p>Statutory health, safety and welfare legislation and regulations including Health and Safety at Work Act 1974 and Construction (Design and Management) (CDM) and policies and procedures to enable safe systems of work. (K10)</p> <p>Hazard and risk assessment, evaluation, and mitigation processes, in the building</p>	<p>Manage and comply with statutory health, safety and welfare policies, procedures and regulation, and contribute to improvements in health, safety and welfare, within their own area of responsibility. (S9)</p> <p>Complete risk assessments to identify, evaluate, manage and mitigate risks. (S10)</p>	<p>Works to health, safety and welfare requirements, safe systems of work, industry standards, statutory regulation and legislation, policies, and codes of practice, and ensuring others do likewise. (B1)</p>

	<p>services engineering environment. (K11)</p> <p>Project management techniques, including quality and information management and assurance systems and the need and use of continuous improvement processes. (K13)</p>	<p>Manage engineering activities that contribute to sustainable development and the United Nations' Sustainable Development Goals (UNSDGs). (S12)</p> <p>Apply project management techniques, identifying, measuring, recording and reporting progress against building services engineering project performance criteria. (S13)</p> <p>Manage quality processes and contribute to quality improvements. (S14)</p>	
<p>Roles, responsibilities, and engagement with others K16 K17 K18 K19 K20 S16 S17 S19 B3 B5</p>	<p>Roles and responsibilities within their organisation and the wider building services engineering sector. (K16)</p> <p>Principles of teamwork and collaboration. (K17)</p> <p>Relationships between organisations, customers, partners and suppliers in the building services engineering sector, including how these are affected by relevant commercial</p>	<p>Monitor and manage individual performance, and the input of others, recognising the need to adapt to, and communicate, changing demands. (S16)</p> <p>Comply with appropriate codes of practice and equality, diversity and inclusion (EDI) requirements. (S17)</p> <p>Apply teamwork and collaboration principles. (S19)</p>	<p>Works effectively, individually and as part of a team. (B3)</p> <p>Promotes equality, diversity and inclusivity in the workplace, maintains professional working relationships with internal, external, and connected stakeholders, and makes reasoned ethical choices. (B5)</p>

	<p>and legal matters. (K18)</p> <p>Equality, diversity and inclusion, including the Equality Act, their responsibilities, its benefits and importance. (K19)</p> <p>Awareness of issues and common symptoms and warning signs of stress, anxiety and depression, plus where to go for help and the resources available. (K20)</p>		
<p>Personal and professional practice K21 K22 S20 S21 B6</p>	<p>Ethical principles and practices, including the implications to legal, civil, reputational and professional risk. (K21)</p> <p>Methods to maintain and enhance professional competence and technical knowledge (CPD). (K22)</p>	<p>Apply ethical principles, Identifying and analysing ethical concerns and making reasoned ethical choices. (S20)</p> <p>Plan, undertake and review their own professional competence, regularly updating, recording and reviewing their continuing professional development (CPD). (S21)</p>	<p>Takes responsibility for their own professional development, seeking opportunities to extend and enhance their knowledge, skills, and experience, and support others, in line with professional codes of conduct. (B6)</p>

Version log

Version	Change detail	Earliest start date	Latest start date	Latest end date
Revised version awaiting implementation	In revision	28/02/2025	Not set	Not set
1.0	Approved for delivery	04/10/2017	27/02/2025	Not set

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