

ST0041/V2

DRAFT APPRENTICESHIP ASSESSMENT PLAN FOR THE BUILDING SERVICES ENGINEERING SENIOR TECHNICIAN APPRENTICESHIP

APPRENTICESHIP REFERENCE NUMBER	LEVEL OF THIS APPRENTICESHIP	INTEGRATION
ST0041	4	Mandatory qualification with apprenticeship assessment

Assessment Plan

[Edit assessment plan form](#)

Assessment details

Introduction

This Apprenticeship Assessment Plan (AAP) sets out the requirements for the assessment of the level 4 Building services engineering senior technician apprenticeship. It should be read in conjunction with the General Requirements for Apprenticeship Assessment. Where there is conflict between this AAP and the General Requirements, this AAP takes precedence. Assessment organisations must also comply with the relevant regulatory framework for apprenticeship assessment.

It is important that the assessment of apprentices is proportionate, valid, and provides reliable evidence of an apprentice's attainment of the relevant knowledge and skills. As such, assessment organisations must design assessments to ensure:

- employers have confidence that the apprentice has reached the expected performance standard
- apprentices are sufficiently secure in their knowledge and skills, so that they could demonstrate their competence in different contexts, for example, a different workplace

Assessment Outcomes

The assessment outcomes group and summarise the knowledge and skills that must be demonstrated in assessments. All assessment outcomes must be assessed.

The assessment outcomes have been created to summarise the content that is not fully assessed by the qualification or qualifications mandated in the occupational standard. The qualification or qualifications assess the knowledge and skills statements that are not mapped here.

Knowledge and skills statements in **bold** are mandatory and must be assessed in every version of the assessment that is made available.

Assessment Outcome	Mapping
--------------------	---------

A01 Engineering Systems Analysis and Technical Evaluation Analyses building services engineering systems by applying engineering principles, mathematical and analytical tools, and technical data sources to address well defined engineering problems. Evaluates materials, techniques and performance information to select compliant solutions that support the design, testing, installation, commissioning or maintenance of building services systems.	K2, K3, K4, K5 S1, S2, S3, S4, S5
A02 Design Development and Technical Modelling Develops and interprets building services engineering designs by producing technical drawings, models and digital representations using analytical and computer-based software. Applies design principles, control processes and industry standards to create compliant technical solutions while recognising the capabilities and limitations of computational and BIM-based tools.	K6, K7, K8 S6, S7
A03 Health, Safety, Compliance and Sustainable Practice Follows and promotes statutory health, safety and welfare requirements while completing risk assessments to identify, evaluate and control hazards in building services environments. Applies industry regulations and sustainability principles to guide compliant, responsible and environmentally conscious engineering practice.	K9, K10, K11, K12 S8, S9, S10
A04 Project Planning, Resource Management and Quality Assurance Plans and coordinates building services engineering tasks by applying project management techniques, allocating resources and monitoring progress against project requirements. Assesses and reports on quality, uses assurance and improvement processes, and supervises others while working effectively within organisational structures, roles and sector relationships.	K13, K14, K16, K17 S11, S12, S13, S14
A05 Ethical Practice, Professional Development and Inclusive Working Applies ethical principles by managing data and information securely and following recognised equality, diversity and inclusion practices in building services environments. Plans, undertakes and reviews their professional development to maintain competence and improve their performance through ongoing CPD activities.	K18, K19, K20 S16, S17, S18

Assessment requirements

Assessment organisations must set apprenticeship assessments. Assessment organisations should consider how technology and digital tools can support innovation and efficiency.

Assessment organisations must design apprenticeship assessments to include a **professional discussion** and, if applicable, any relevant constraints.

Any additional assessment, or assessments, must be selected from the following list of methods, to ensure the assessment outcomes are met in full. Assessments available in the list may be used more than once:

- **report**
- **presentation**
- **portfolio**
- **questions and answers**
- **project**

Assessment organisations must have due regard to all relevant frameworks, standards, and industry-recognised practices and guidance published by regulators, professional bodies, Sector Representative Organisations (SROs) and Standard Setting Bodies (SSBs).

This assessment plan will be updated to specify the title, version and date of the Industry Competence Steering Group (ICSG) competence frameworks once published, and awarding organisations are required to fully align with the ICSG competence frameworks once they have been included in this assessment plan.

Assessment organisations must design apprenticeship assessment that meets the following requirement(s):

- fully aligns with the Construction Skills Certification Scheme (CSCS) alliance member card scheme requirements, insofar as they relate to assessment of the knowledge and skills within the apprenticeship-occupational-standard, such that the apprentice may use attainment of the apprenticeship assessment to support an application for the CSCS Professional Qualified Person card.
- fully aligns with the Engineering Council UK-SPEC requirements, where they relate to assessment of the knowledge and skills within the apprenticeship-occupational-standard.

Apprentices may be assessed at any appropriate point during their apprenticeship programme.

Assessments may be designed to allow a centre or training provider to mark assessments. The assessment organisation is responsible for ensuring all assessments are sufficiently reliable and valid, and for the accuracy of any centre or training provider marking.

Performance descriptors

Performance descriptors describe the level of performance required to achieve a pass or distinction grade. Assessment organisations must design assessments that align with these descriptions.

Performance Category	Pass	Distinction
Applied Knowledge	Demonstrates sound application of building services engineering knowledge to address well defined but complex and	Applies building services engineering knowledge with confidence and precision, consistently producing high- quality outputs in response to well defined but

	nonroutine problems and reach appropriate, generally effective outcomes while operating- within set parameters and meeting organisational or sector expectations.	complex and non-routine problems, with solutions that are appropriate- and often enhance outcomes or processes
Applied Skills	Identifies and applies suitable cognitive and practical skills in building services contexts to complete work activities, adapting as necessary to meet requirements. Methods chosen are generally appropriate-, with results that meet organisational or sector expectations.	Adapts and applies cognitive and practical skills in building services contexts with a high degree of flexibility and operational fluency, ensuring that methods are both effective and optimised for quality and efficiency of service outcomes.
Regulatory and Procedural Awareness	Applies relevant building services legislation, regulations and organisational procedures with sound judgement, adapting appropriately to varied and occasionally complex situations while remaining- within set parameters	Interprets and applies building services regulatory and procedural requirements with insight and appropriate flexibility, identifying- implications and making informed decisions in varied and occasionally complex situations
Communication and Collaboration	Communicates clearly and collaborates effectively with colleagues and stakeholders in building services- contexts, contributing to effective coordination and supporting responsive service delivery.	Communicates and collaborates with confidence and insight, tailoring approach to meet diverse stakeholder needs in building services- environments and contributing to improved collaboration and service outcomes.

Information Use and Decision Making	Analyses and interprets relevant engineering and project information to make informed decisions, showing a clear awareness of the occupational context and the broader scope of the role.	Analyses, interprets and evaluates information from a range of sources, providing insightful justification for decisions and demonstrating a strong awareness of broader implications within the occupational area.
Responsibility and Autonomy	Takes responsibility for actions and decisions within set parameters. Manages own work and, where relevant, oversees others or coordinates resources with adequate awareness of risks and priorities.	Proactively takes responsibility for actions and decisions within set parameters. Manages own work and the coordination of others, independently using sound judgement about risks and priorities to manage resources or actions.

Professional recognition

This apprenticeship aligns with the requirements for professional body recognition as detailed in the occupational standard.

Additional qualification

The qualifications detailed in the occupational standard must be completed before the end of the apprenticeship.

Crown copyright 2026 You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence.

Visit www.nationalarchives.gov.uk/doc/open-government-licence.

EPA menu