Skills England

Draft Preview

DRAFT APPRENTICESHIP ASSESSMENT PLAN FOR THE HEAT NETWORK MAINTENANCE TECHNICIAN APPRENTICESHIP

ST1308/V2

APPRENTICESHIP REFERENCE NUMBER	LEVEL OF THIS APPRENTICESHIP	INTEGRATION
ST1308	3	None

Assessment Plan

Assessment details

Introduction

This apprenticeship assessment plan (AAP) sets out the requirements for the assessment of the level 3 heat network maintenance technician apprenticeship. It should be read in conjunction with the Requirements for Apprenticeship Assessment. Where there is conflict between this AAP and the Requirements for Apprenticeship Assessment, 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.

Assessment organisations must ensure all the core assessment outcomes and the assessment outcomes for one of the following options are assessed for each apprentice:

- Option 1: Heat network distribution systems specialist
- Option 2: Heat network residential systems specialist

Table 1: Assessment outcomes

Table 1 sets out the assessment outcomes and the mapped knowledge and skill statements.

All assessment outcomes must be assessed. Knowledge and skills statements listed in the mandatory statements column must be assessed in every version of the assessment that is made available.

Knowledge and skills statements that offer opportunities to develop functional English and maths are identified with an asterisk.

Core Assessment Outcome	Mapped statements	Mandatory statements
AO1: Work planning and information management Plans and organises heat network tasks and manages the information, tools and equipment required to complete them.	K5, K24*, K37* S1, S15*, S23*	K5, K24, K37 S1, S15, S23
AO2: Professional practice and communication Applies professional practices and undertakes learning and development activities. Selects communication techniques to match the audience.	K26, K28, K29, K30, K31*, K33* S16, S18, S19, S20, S21*, S22*, S24	K26, K30, K31, K33 S16, S20, S21, S22
AO3: Health, safety, environmental and regulatory compliance Complies with health, safety and environmental requirements when preparing the work site and undertaking heat network maintenance activities. Identifies hazards and risks and applies control measures.	K3*, K4*, K6*, K7*, K8*, K9, K10, K11 S2, S3, S4*, S5	K6, K8, K10 S2, S3, S4, S5
AO4: Heat network operational theory Applies heat network theory to measure and calculate operating parameters.	K1, K2, K14*, K15*, K16*, K19, K32 S7*, S8*, S9*	K14, K15, K16, K32 S7, S8, S9
AO5: Heat network fault diagnosis Conducts inspections, diagnostics and fault-finding activities.	K25*, K27, K35, K36 S10, S17, S26, S27*, S28	K25, K36 S10, S27, S28
AO6: Heat network maintenance, repair and installation Maintains water network systems, heat network assets and components. Repairs and replaces pipework and installs electrical wiring components.	K12, K13, K17, K18*, K20, K21, K22, K23, K34 S6, S11, S12*, S13, S14, S25	K12, K17, K21, K23 S6, S11, S13, S14

Option 1: Heat network distribution systems specialist	Mapped statements	Mandatory statements
AO7: Distribution plant operation and maintenance Maintains distribution plant equipment. Operates plant equipment locally and remotely.	K38, K39, K40, K41, K42, K43*, K44*, K45 S29, S30*, S31*, S32	K39, K40, K45 S29, S30, S31, S32
Option 2: Heat network residential systems specialist	**Mapped statements**	**Mandatory statements**
AO8: Residential heat network maintenance, metering and commissioning Maintains residential heat network systems. Installs and configures residential heat metering systems, and commissions HIUs and space heating circuits.	K46, K47, K48, K49, K50*, K51*, K52, K53 S33, S34*, S35*, S36, S37	K46, K47, K52, K53 S33, S36, S37

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 at least one **simulation.**

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:

- **observation**
- **demonstration**
- **question and answer**
- **interview**
- **written assessment**
- **portfolio**

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.

Table 2: performance descriptors

Table 2 sets out the performance descriptor categories and descriptors for pass and distinction. Assessment organisations must design assessments that align with these descriptions.

Performance Category	Pass	Distinction
Applied Knowledge	Applies sound application of factual, procedural, and theoretical heat network and operation maintenance knowledge in a broad range of varied work activities, performed in a variety of contexts, most of which are complex and non-routine.	Applies thorough application of factual, procedural, and theoretical heat network and operation maintenance knowledge in a broad range of varied work activities, performed in a variety of contexts, most of which are complex and non-routine.
Applied Skills	Selects and applies heat network and operation maintenance skills, methods, and procedures consistently in a broad range of varied work activities and a variety of contexts, most of which are complex and non-routine. Solves well defined problems, which may be complex and non-routine, with sound judgement.	Integrates using heat network and operation maintenance skills, methods, and procedures proactively and resourcefully in a broad range of varied work activities and a variety of contexts, most of which are complex and non-routine. Solves well defined problems, which may be complex and non-routine, that improve outcomes.
Regulatory and Procedural Awareness	Interprets and evaluates health, safety, environmental and heat network operational legislation, regulation, and guidance relevant to the role, with minimal noncritical errors, and with some depth of	Applies evaluation of health, safety, environmental and heat network operational legislation, regulation, and guidance relevant to the role, with minimal noncritical errors, and with greater depth of insight and adaptability.

	insight and adaptability.	
Communication and Collaboration	Participates effectively in team environments and applies effective communication approaches, supporting daily operations.	Communicates clearly and confidently in team environments, adapting communication approaches, supporting effective daily operations.
Information Use and Decision Making	Interprets and evaluates relevant heat network and operation maintenance information, from a variety of sources, supporting decisions and actions with sound judgement.	Applies evaluation of heat network and operation maintenance information from a variety of sources, relevant to the role, with insight, supporting conclusions that improve outcomes.
Responsibility and Autonomy	Takes responsibility for initiating and completing heat network and operation maintenance tasks and procedures including, where relevant, taking responsibility for supervising or guiding others. Exercises responsibility, autonomy and judgement within limited parameters.	Takes responsibility for initiating and completing heat network and operation maintenance tasks and procedures with confident autonomy and sound judgement within limited parameters. Proactively manages own work, confidently, recognising when to refer issues beyond their responsibility.

Professional recognition

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

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.