



ENERGY &  
ENVIRONMENT  
AWARDS

Skills for a greener world

# EEA Level 3 End-point Assessment Apprentice Guide for

Engineering Maintenance Technician – Single Discipline

QAN 610/6343/5  
ST1426 V1.0

# EEA Level 3 End-point Assessment

## Apprentice Guide for

### Engineering Maintenance Technician – Single Discipline V1.0

QAN 610/6343/5

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## Updates to this Guide

Since the first publication of the Energy & Environment Awards (EEA) Engineering Maintenance Technician (EMT- SD) – Single Discipline Apprentice Guide, the following updates have been made.

Version	Date first published	Section updated	Page(s)
v1.0	September 2025	First published	All



### At A Glance Component 1: Observation with questions

Date(s):	
Time:	
Location:	
Examination Conditions:	With an EEA Independent assessor in a realistic working environment that does not require special clearance. <b>Simulation is not permitted, except in the exceptional circumstances</b> such as national security restrictions, nuclear licenced sites or live gas environments, where access is limited.
Additional Requirements:	
Assessed and marked by:	Independent assessor/EEA



### At A Glance Component 2: Interview based on an EPA portfolio

Date(s):	
Time:	
Location:	
Examination Conditions:	With an EEA Independent assessor at your employer's premises or a suitable venue for example a training provider's premises.
Additional Requirements:	
Assessed and marked by:	Independent assessor/EEA



### At A Glance Component 3: Multiple-choice test

Date(s):	
Time:	
Location:	
Examination Conditions:	Controlled by an invigilator
Additional Requirements:	
Assessed and marked by:	EEA

## Introduction



Energy & Environment Awards has been selected by your employer to carry out end-point assessment (EPA) and it is our job to ensure that you are assessed fairly.

## How This Apprenticeship Guide Is Organised

- ✓ Section 1:  
What is in the Apprenticeship Guide?
- ✓ Section 2:  
An Apprentice's End-point Assessment Journey
- ✓ Section 3:  
End-point Assessment Components

## How to Use This Guide



This guide has been split into 3 sections. You can dip into each section that you are working on where you will find useful information, practical advice, tips you need and useful dates to successfully complete your EPA.

Throughout we have used headings and cross referenced to our EPA Engineering Maintenance Technician (EMT- SD) – Single Discipline v1.0 Specification which provides details of the EPA components.

## Section 1: The Basics

### What is an Apprenticeship Standard?



An apprenticeship standard is a description of your apprenticeship and it is based on the engineering maintenance technician – single discipline standard, which was written by employers. It contains the engineering maintenance technician's job profile, and describes the knowledge, skills and behaviours (KSBs):

- Knowledge: (as part of KSBs) – specific information, technical detail, and 'know-how' identified as part of the apprenticeship standard that must be evidenced during your end-point assessment
- Skills: (as part of KSBs) – the practical application of knowledge identified as part of the apprenticeship standard that must be evidenced during end-point assessment
- Behaviours (as part of KSBs) – specific mindsets, attitudes or approaches identified as part of the apprenticeship standard that must be evidenced during end-point assessment

The standard can be accessed via the link below:

<https://skillsengland.education.gov.uk/apprenticeships/st1426-v1-0?view=standard>

Select the occupational standard tab.

### What is an Assessment Plan?

An Assessment Plan is also written by employers and provides details of what is required for you to pass your end-point assessment. It includes details of what you will be assessed on, how each assessment will take place, what methods will be used and who will assess you.

Energy & Environment Awards designed the end-point assessment (EPA) to meet the requirements of the Assessment Plan. The Assessment Plan can be accessed via the link below:

<https://skillsengland.education.gov.uk/apprenticeships/st1426-v1-0?view=standard>

Select the EPA plan tab.

## What is an end-point assessment (EPA)?

The end-point assessment is the assessments you take at the end of your apprenticeship. You will typically spend 42 months on-programme working towards your standard. For those apprentices that started before 1st August 2025, they are required to spend a minimum of 12 months on-programme. For new starts from 1 August 2025, the minimum duration has reduced to 8 months. After this you have a Gateway meeting with your employer or training provider to confirm you are ready for the end-point assessments. The words end-point means that you will be assessed at the end of your on-programme (training) to confirm you have met the standard. Your EPA period will typically last 4 months.

## What are the Gateway Requirements?

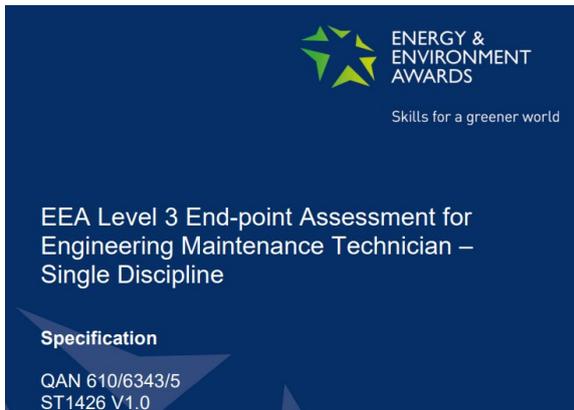
Gateway is a meeting where your employer, training provider and you ensure that you are confident that you can demonstrate all the KSBs defined in the apprenticeship standard and you are ready for EPA. After the meeting, your training provider will confirm the outcomes of the Gateway meeting by sending a signed document to EEA. The document confirms that you have met the following Gateway requirements:

- confirmed that you are ready to take the EPA
- achieved English and mathematics qualifications in line with the apprenticeship funding rules
- compiled an EPA portfolio, which your will interview will be based on

Your training provider will send copies of these documents to Energy & Environment Awards.

## What is the EPA Specification?

The end-point assessment specification provides details of:



- the assessment methods used in your EPA
- KSBs that are covered by each assessment
- KSBs amplification and guidance

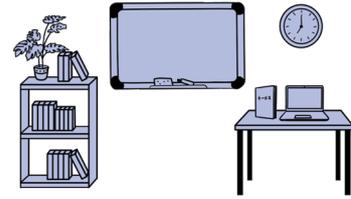
The Specification can be accessed via this link:

<https://energyenvironmentawards.co.uk/wp-content/uploads/2025/09/EEA-L3-EPA-Specification-EMT-Single-Discipline-ST1426-V1.0- -v1.0.pdf>

## Section 2: Apprentice EPA Journey

Let us Begin Your EPA Journey.

Find a quiet place and read on....



Your EPA journey consists of 3 elements:

- A training programme with on the job, off the job elements, typically 42 months
- Gateway meeting window
- End-point Assessment (EPA) typically 4 months

Your journey begins with the training program. Your employer and training provider are responsible for this part. This is where you will gain the required Knowledge, Skills and Behaviours (KSBs).

Engineering maintenance technician – single discipline is a core and options apprenticeship standard. You must be trained and assessed against the core and one of the following specialisms:

- Electrical engineering maintenance technician
- Control and instrumentation engineering maintenance technician
- Mechanical engineering maintenance technician

### How will you be assessed in the end-point assessment?

You will be assessed on the following components, which can be taken in any order:

- 1. Observation with questions**
- 2. Interview based on an EPA portfolio**
- 3. Multiple-choice test**

It is important for you to keep a record of when your 3 components are scheduled. We suggest you use the 'At a Glance' tables on page 5.

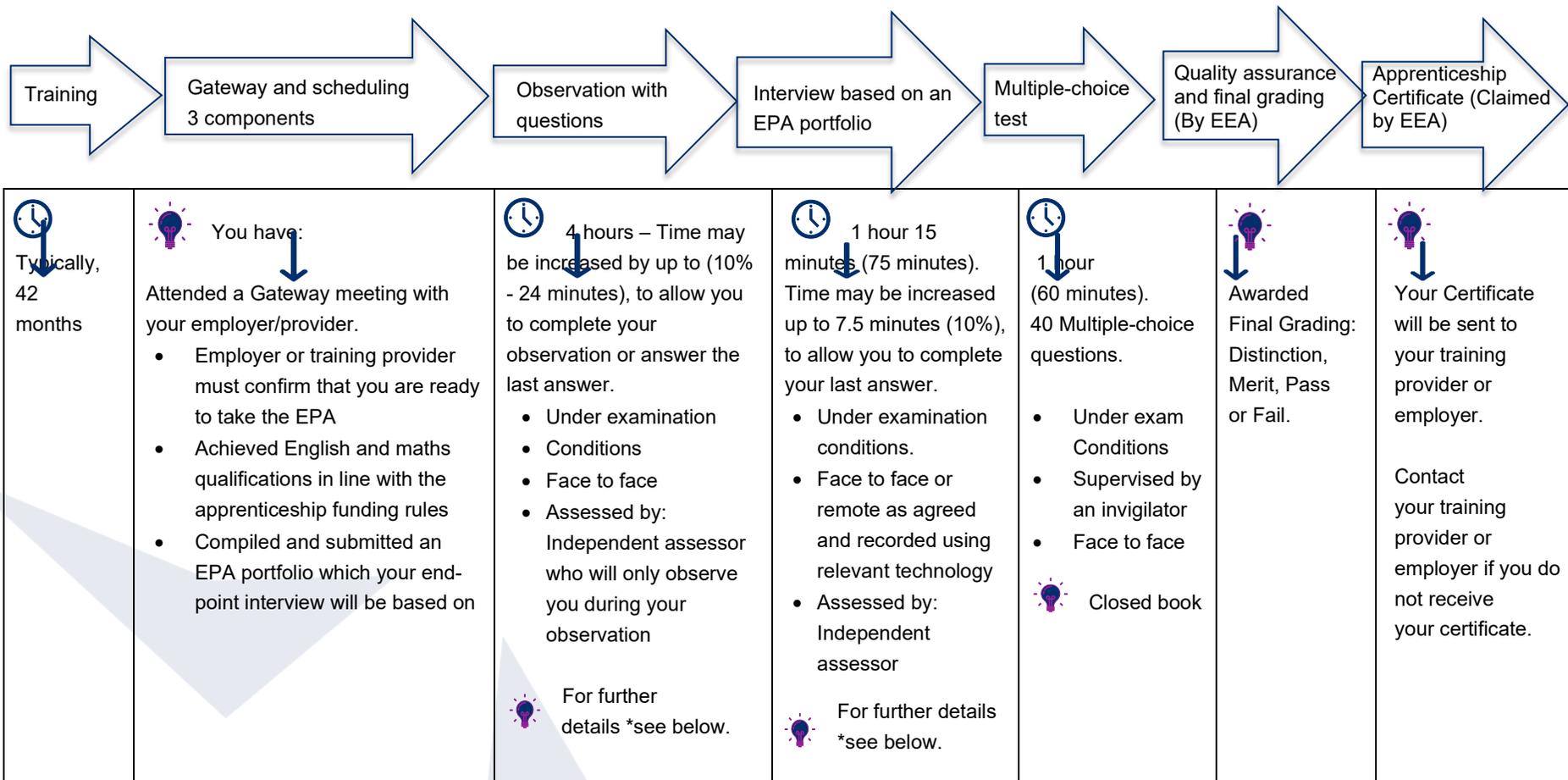
You must pass all 3 components to achieve this qualification. For further guidance refer to Section 3 End-point Assessment Components.

### Reasonable adjustments

A reasonable adjustment is any action that helps to reduce the effect of a disability or difficulty that places you at a substantial disadvantage during assessments. If this applies to you make sure you tell your training provider who can make an application for a reasonable adjustment to Energy & Environment Awards on your behalf.

## Your EPA Journey in a Diagram

The diagram below illustrates the order of your EPA **journey** from the day you register to your final certification. Please note that assessments can take place in any order:



\*For further details refer to Section 3 in this Apprentice Guide or Section 2 of the Specification.

## Section 3: End-point Assessment Components

Now let us continue your journey through EPA. There are 3 components that you must pass to be awarded a certificate.

### Component 1: Observation with questions

#### Overview

An observation with questions involves an independent assessor, approved by EEA observing and questioning you in your day-to-day duties under normal working conditions. You must be allowed to demonstrate the application of your job role knowledge, skills and behaviours (KSBs) through natural occurring evidence. This will be observed where you are carrying out your usual work. Simulation is not permitted, except in the exceptional circumstances such as national security restrictions, nuclear licenced sites or live gas environments, where access is limited. The independent assessor will ask you questions during or after the observation. You will be given at least **2 weeks notice** of the assessment.



The following table outlines the procedure for conducting an observation with questions:

#### Structure of your observation with questions



The total assessment time is 4 hours and this includes questioning. The assessor can increase the time by up to 24 minutes (10%) to allow you to complete your work or respond to a question if necessary.

The assessment may be split into discrete sections held on the same working day.

- The independent assessor will only be observing you
- Breaks may be taken during the observation with questions to allow you to move from one location to another and for meal/comfort breaks
- During breaks the clock will be stopped. The assessment time is not reduced

**You may choose to end the observation with questions early.** Before doing so, you must be confident that you have demonstrated competence against all relevant assessment requirements.

<p>Where will the assessment take place?</p>	<p>It will take place at your workplace in a real work setting under normal working conditions. <b>Simulation is not allowed unless there is an exceptional case, see overview above.</b></p> <p>Questioning that occurs after the assessment should take place in a quiet location free from distractions and influence.</p>
<p>What tasks will I have to cover?</p>	<p>You must carry out <b>all</b> of the following core activities during your observation with questions:</p> <p><b>Core</b></p> <ul style="list-style-type: none"> <li>• organising own work</li> <li>• maintaining workplace health, safety, security, and environmental compliance</li> <li>• using work information and following working practices</li> <li>• completing work records</li> <li>• communicating with others</li> </ul> <p>You will also be expected to carry out <b>ONE</b> of the following specialist options:</p> <p><b>Specialist Option - Electrical maintenance technician requirements</b></p> <ul style="list-style-type: none"> <li>• conducting planned electrical maintenance</li> </ul> <p><b>Specialist Option - Control and Instrumentation maintenance technician requirements</b></p> <ul style="list-style-type: none"> <li>• conducting planned control and instrumentation maintenance</li> </ul> <p><b>Specialist Option - Mechanical maintenance technician requirements</b></p> <ul style="list-style-type: none"> <li>• conducting planned mechanical maintenance</li> </ul> <p>The practical task must allow you to undertake the activities required for the observation with questions.</p> <p> For further details refer to 'Knowledge, Skills and Behaviours (KSBs) Coverage' in the Engineering maintenance technician (EMT) - single discipline</p>

	<p>Specification on pages 12 - 78. <b>A link to the EMT – single discipline Specification is available on page 9.</b></p>
<p>What knowledge, skills and behaviours (KSBs) do I have to demonstrate during the observation with questions?</p>	<p><b>NOTE:</b> You are only required to demonstrate core and your specialist option specific knowledge, skills and behaviours. Your employer/training provider will ensure that you have the opportunity to cover all aspects of the KSBs in an integrated way in a real work setting under normal working conditions.</p> <p><b>Core KSBs</b></p> <p><b>Organising own work (KSBs):</b></p> <p><b>K4</b> Business operation considerations: quality, cost, delivery, and ethical practices.</p> <p><b>K5</b> Planning, prioritisation, organisation, and time management techniques.</p> <p><b>S2</b> Use planning, prioritising, organising, and time management techniques to plan tasks.</p> <p><b>S3</b> Identify and organise resources to complete tasks. For example, consumables.</p> <p><b>Maintaining workplace health, safety, security, and environmental compliance (KSBs):</b></p> <p><b>K9</b> Work environment hazards and risks. Risk assessments.</p> <p><b>K10</b> Safe systems of work.</p> <p><b>K11</b> Personal protective equipment (PPE): selection, use, and care.</p> <p><b>K12</b> Asset security requirements.</p> <p><b>K15</b> Recycling and waste management requirements.</p> <p><b>S7</b> Identify environmental and health and safety hazards and risks and apply control measures.</p> <p><b>S8</b> Apply health, safety, and environmental procedures in compliance with regulations, standards, and guidance. For example, signage and barriers, working at height, confined spaces, and COSHH.</p> <p><b>S9</b> Follow security procedures. For example, site access, document classification, and securing assets.</p>

**S12** Segregate items for reuse, recycling, and waste.

**B1** Prioritise safe working practices. For example, risk aware, minimise risks, and proactively work towards preventing accidents.

**Using work information and following working practices (KSBs):**

**K19** Sources of engineering information.

**K20** Engineering standards - British (BSI and International (ISO)).

**K22** Quality management systems

**K23** Standard operating procedures (SOP): what they are and why they are important.

**K24** Foreign material exclusion requirements.

**S1** Review and use information. For example, work instructions, drawings, design specifications, and plant configurations.

**S5** Identify equipment to work on. Check plant configuration is as defined.

**S6** Prepare the work area for maintenance tasks.

**S14** Apply engineering maintenance standards and procedures.

**S15** Apply foreign material exclusion procedures.

**S16** Follow maintenance tools and equipment control procedures. For example, handling and storage.

**S17** Reinstate the work area.

**S23** Identify and highlight issues (red pen) with drawings as found.

**B3** Take ownership for the delivery and quality of own work. For example, self-motivated, disciplined in the approach to work tasks, and work carried out in line with standards.

**Completing work records (KSBs):**

**K25** Documentation requirements: documentation control, auditable records.

**S21** Record information.

**Communicating with others (KSBs):**

**K29** Verbal communication methods and techniques.  
Engineering maintenance terminology.

**S19** Communicate with others to give and receive information.  
For example, colleagues, customers, and stakeholders.

**Specialist Option: Electrical engineering maintenance technician**

**Conducting planned electrical maintenance KSBs:**

**K34** Electrical isolation and de-isolation requirements: lockout tagout and testing for dead.

**K41** Electrical plant, equipment, and systems maintenance requirements: removing and replacing parts, inspecting, testing, setting up, adjusting, cleaning, and functional testing.

**K42** Electrical maintenance tools, measurement, and test equipment application, operation, care and calibration requirements.

**S27** Confirm safe electrical isolation (lockout tagout) method has been applied and test for dead.

**S28** Select, check, and use electrical maintenance tools, measurement, and test equipment.

**S31** Inspect and test electrical aspects of plant. For example, visual checks, insulation and continuity checks, thermographic surveys, and voltage levels.

**S32** Remove and replace electrical parts.

**S34** Set up, align and adjust electrical aspects of plant.

**S35** Clean parts. For example, removal of dust and debris.

**S36** Conduct and confirm electrical and connected services deisolation.

**S37** Conduct functional testing.

**Specialist Option: Control and instrumentation engineering maintenance technician**

**Conducting planned control and instrumentation maintenance KSBs:**

**K47** Isolation and de-isolation of connected services considerations and requirements.

**K48** Electrical isolation and de-isolation requirements: lockout tagout, testing for dead.

**K55** Control and instrumentation equipment and control systems maintenance requirements and methods: removing and replacing instruments and sensors, inspecting, testing, cleaning, setting up, calibration, and functional testing.

**K56** Control and instrumentation maintenance tools and equipment application, operation, care, and calibration requirements.

**K60** Different types of cables; their specifications and application.

**S38** Conduct and confirm safe isolation of connected services.

**S39** Confirm safe electrical isolation (lockout tagout) method has been applied and test for dead.

**S40** Select, check, and use control and instrumentation maintenance tools, measurement and test equipment.

**S43.** Inspect and test control and instrumentation systems.

**S44** Check calibration and make adjustments.

**S45** Check loop function.

**S46** Set up and adjust control and instrumentation systems.

**S47** Clean parts. For example, removal of dust and debris.

**S48** Remove and replace instruments and sensors.

**S49** Re-connect instrumentation power supply, cables, pipework, and services.

**S50** Conduct and confirm electrical and connected services de-isolation.

**S51** Conduct functional testing.

	<p><b>Specialist Option: Mechanical engineering maintenance technician</b></p> <p><b>Conducting planned mechanical maintenance KSBs:</b></p> <p><b>K67</b> Isolation and de-isolation of connected services: considerations and requirements.</p> <p><b>K68</b> Mechanical maintenance requirements and techniques: removing and replacing parts, inspecting, testing, setting up, adjusting, cleaning, and lubricating.</p> <p><b>K69</b> Mechanical maintenance tools and equipment application, operation, care, and calibration requirements.</p> <p><b>S52</b> Check and confirm safe isolation of connected services.</p> <p><b>S53</b> Select, check, and use mechanical maintenance tools and equipment.</p> <p><b>S56:</b> Check condition and operation of mechanical aspects of plant and equipment. For example, pumps.</p> <p><b>S57</b> Remove and replace mechanical parts.</p> <p><b>S58</b> Examine mechanical parts for defects. For example, pump seals.</p> <p><b>S59</b> Set up, align, and adjust mechanical aspects of plant.</p> <p><b>S60</b> Clean parts. For example, removal of dust and debris.</p> <p><b>S61</b> Lubricate mechanical assemblies.</p> <p><b>S62</b> Confirm electrical and connected services deisolation.</p> <p><b>S63</b> Conduct functional testing.</p> <p> For further details refer to 'Knowledge, Skills and Behaviours (KSBs) Coverage' in the Engineering maintenance technician (EMT) – single discipline Specification on pages 12 - 78. <b>A link to the EMT - single discipline Specification is available on page 9.</b></p>
<p>What resources can I use?</p>	<p>Equipment and resources needed for the observation must be:</p> <ul style="list-style-type: none"> <li>• provided by your employer or training provider</li> <li>• a suitable premises</li> <li>• the plant, machinery, equipment and PPE required for the job</li> </ul>

	<ul style="list-style-type: none"> <li>in good and safe working condition</li> </ul> <p>Relevant work instructions/manuals must be available for you to use in hard copy or electronically.</p>
How many questions will I be asked?	<p>The independent assessor:</p> <ul style="list-style-type: none"> <li>will ask at least 4 open questions to assess the related underpinning knowledge</li> <li>may ask follow-up questions in order to seek clarification from you</li> </ul>
Who will assess me?	An independent assessor, approved by Energy & Environment Awards.
Preliminary Grading	<p>The independent assessor will award a preliminary grade.</p> <p>To gain a Pass, you must successfully achieve <b>ALL</b> of the pass descriptors.</p> <p>To achieve a Distinction you must successfully achieve <b>ALL</b> the Pass descriptors and <b>ALL</b> of the descriptors.</p>
Overall grading for this component	Fail, Pass or Distinction.

### Practice Component 1: Observation with questions

You should have an opportunity to have a practice observation with questions which mirrors the real assessment. A practice observation would be set up for you using the structure in the table above by your employer or training provider.

## Component 2: Interview based on an EPA portfolio

### Overview

The interview is based on your EPA portfolio. An EPA Portfolio Template has been designed to assist you during your interview. You should use the EPA Portfolio to collate evidence in preparation for your interview. A set of tasks are provided to support the compilation of your EPA portfolio. Each task should help you to demonstrate how you have met the core and specialist options KSBs in order to carry out your occupational role as an engineering maintenance technician – single discipline effectively and safely. The interview allows for testing of responses where there are a range of potential answers that cannot be tested through the multiple-choice test. You will be given at least **2 weeks notice** of the interview.



The following table outlines the procedure for conducting an interview based on your EPA portfolio:

Who will assess me?	1 independent assessor, approved by EEA will conduct the professional interview.
How will the interview based on an EPA portfolio be organised?	<p><b>Locations:</b> Your interview will take place at your employer's premises or a suitable venue.</p> <p> <b>Time:</b> Your professional interview must last 75 minutes (1 hour 15 minutes). The independent assessor can increase the time of the interview by 7.5 minutes (10%). This time is to allow you to respond to a question if necessary.</p> <p><b>Your interview will be:</b></p> <ul style="list-style-type: none"> <li>• a discussion between you and the independent assessor</li> <li>• face to face or remote, as agreed</li> <li>• assessed and outcomes will be recorded by the assessor on official EEA interview documents</li> <li>• recorded using the relevant technology such as Microsoft Teams or an audio recording device</li> </ul> <p>You will have access to your EPA portfolio throughout the interview.</p>
What topics will I have to cover?	The interview will focus on the following tasks in your EPA portfolio:

	<p><b>Core</b></p> <ul style="list-style-type: none"> <li>• Impact of sector on maintenance activities</li> <li>• Roles and responsibilities</li> <li>• Working sustainability</li> <li>• Participating in continuous improvement</li> <li>• Teamworking</li> <li>• Produce written documents</li> <li>• Digital and information technology</li> </ul> <p><b>Specialist option: Electrical maintenance technician</b></p> <ul style="list-style-type: none"> <li>• Electrical maintenance problem solving and fault-finding</li> <li>• Cable installation and termination</li> </ul> <p><b>Specialist option: Control and instrumentation maintenance technician</b></p> <ul style="list-style-type: none"> <li>• Control and instrumentation maintenance problem solving and fault-finding</li> </ul> <p><b>Specialist option: Mechanical maintenance technician</b></p> <ul style="list-style-type: none"> <li>• Mechanical maintenance problem solving and fault-finding</li> <li>• Bench fitting techniques</li> </ul> <p> For further details refer to core and specialist option knowledge, skills and behaviours (KSBs) coverage in the engineering maintenance technician (EMT) – single discipline Specification on pages 83 - 112. <b>A link to the EMT – single Discipline Specification is available on page 9.</b></p>
How many questions will I be asked?	<ul style="list-style-type: none"> <li>• The independent assessor will ask at least 9 questions to explore your level of knowledge, skills and behaviours</li> <li>• Standardised open questions will be asked based on the contents of the evidence in your EPA portfolio</li> <li>• Follow-up questions in order to seek clarification</li> </ul>
Preliminary Grading	<p>The independent assessor will award a preliminary grade.</p> <p>To gain a Pass, you must successfully achieve <b>ALL</b> of the pass descriptors.</p> <p>To achieve a Distinction you must successfully achieve <b>ALL</b> the Pass descriptors and <b>ALL</b> of the descriptors.</p>
Overall grading for this component	Fail, Pass or Distinction.

## EPA portfolio requirements

The requirements are as follows:

### EPA Portfolio Template

Throughout the on-programme part of your apprenticeship you must compile an EPA portfolio to support you in your interview. During the interview the independent assessor will ask questions based on the evidence contained in your EPA portfolio.

For further guidance refer to:

- Section below 'How do I organise my portfolio of evidence?'
- EMT – Single Discipline Specification Section 5: Guidance on EPA portfolio

### How do I organise my EPA portfolio?

You must complete an EPA Portfolio Template. You should request the EPA Portfolio Template from your training provider.

Your EPA portfolio template comprises of core; and specialist option tasks to support the compilation of the portfolio. Each task should help you focus on the specific knowledge, skills and behaviours that will be assessed in the interview.

For each task there is:

- a series of questions to be answered
- a text box following each question for you to provide your response. These boxes will expand to take more text; however, quality of answer is more important than quantity. You will be able to use your answers as prompts in the professional interview
- tables for you to record evidence that supports the examples provided in response to the questions. A copy of the tables can be found in Appendix B

Your EPA portfolio is **not assessed**. It serves the following purposes:

- A carefully prepared EPA portfolio will support you during the interview
- Your organised EPA portfolio will allow you to refer to examples and discuss the evidence with the independent assessor
- It allows the assessor to review it before the interview to help focus and contextualise the questions that you will be asked

## What should I include in my portfolio?

### Quality vs quantity



You should be supported in selecting evidence for your EPA portfolio by your employer or training provider.

We would advise you to choose the best pieces of evidence to support the answer to each question in the EPA portfolio template. Your completed EPA portfolio must include seven core tasks and option tasks, depending on your job role. The option tasks vary by discipline:

- Electrical Engineering Maintenance: two option tasks
- Control and Instrumentation Engineering Maintenance: one option task
- Mechanical Engineering Maintenance: two option tasks

Each task must be accompanied by your written responses and at least one piece of supporting evidence. No other evidence should be included.

### Examples of acceptable evidence:

- evidence/proof of what you learned and did at work, showing you have the knowledge, skills and behaviours needed for your job role
- workplace documentation and records for example maintenance records, fault investigation reports, job task sheets/job card/times sheets, equipment maintenance/service records related to you
- workplace policies and procedures annotated relating to the tasks
- witness statements signed and dated by coaches/trainers
- annotated photographs
- video clips with a maximum total duration of 10 minutes; you must be in view and identifiable carrying out the tasks

The above is not a definitive list. You can include other relevant evidence sources.



You **must not** include in your EPA portfolio any methods of self-assessment or reflective accounts.



In rare cases where **national security** is involved, your employer may need to remove (redact) sensitive information from your evidence. This will follow your employer's security policy. If redaction isn't possible, Energy & Environment Awards and your employer may agree for the independent assessor to review the evidence on-site before your interview takes place.

Evidence must be:

- produced by you (authentic)
- relevant to the task
- cross referenced and easily accessible in the portfolio
- produced during the time you were carrying out your on-programme training

What can I do to prepare for the interview based on an EPA portfolio?

You should:

- ensure there is quality evidence to cover the KSBs in the EPA portfolio template
- be familiar with the structure of your EPA portfolio
- know the tasks/KSBs covered by the interview
- know where you have referenced your evidence by referring to your EPA Portfolio Evidence Log. A copy is included in Appendix B
- know how you will be graded

The role of your employer or training provider

Employers or training providers are expected to support you in preparing your EPA portfolio by:

- providing clear instruction and deadlines to allow you to plan and compile your portfolio in preparation for the Gateway meeting
- advising on which pieces of evidence to select
- authenticating evidence as valid
- signing off the EPA portfolio
- submitting the portfolio to EEA as part of Gateway requirements

Practice Component 3: Interview based on an EPA portfolio

You should have an opportunity to have a practice interview based on an EPA portfolio which mirrors the real assessment. The practice interview would be set up for you using the structure in the table above by your employer or training provider.

## Component 3: Multiple-choice Test

### Overview

The multiple-choice test is a computer or paper-based test. You will have 60 minutes to complete the test. The test consists of 40 questions.

The multiple-choice questions will have four possible answers of which one will be correct.

You must be given at least **2 weeks notice** of the date and time of the multiple-choice test.



The following table outlines the procedure for conducting the multiple-choice test:

Who will start and finish my multiple-choice test?	You will sit your multiple-choice test in the presence of an invigilator.
What format will my test take?	<p>The test may be paper-based or taken online. Your training provider will let you know what the format of your test is.</p> <p>All other aspects of the test are exactly the same, including:</p> <ul style="list-style-type: none"> <li>• content</li> <li>• timings</li> <li>• question types</li> <li>• scoring</li> </ul>

How will the question appear in a paper-based test?

Here is an example of how the question will appear:

Question 1	
In a workplace, who is responsible for maintaining health and safety?	
Possible answers	
a)	Everyone
b)	Employers
c)	Safety managers
d)	Most senior person on-site

You must **select one answer** that you think is correct. You will be provided with an answer sheet where you will be expected to shade in the answer you have selected. Here is an example:


**ENERGY & UTILITIES  
INDEPENDENT  
ASSESSMENT SERVICE**

Candidate ID .....	Attempt .....
Last Name .....	
First Name .....	
Exam Date .....	Paper .....
Centre Name .....	
Centre Number .....	

**MARKING INSTRUCTIONS**

**ANSWER COMPLETED CORRECTLY**

Examples of how NOT to mark your examination sheet. **These will not be recorded**

**DO NOT** partially shade the answer circle.

**DO NOT** use ticks or crosses.

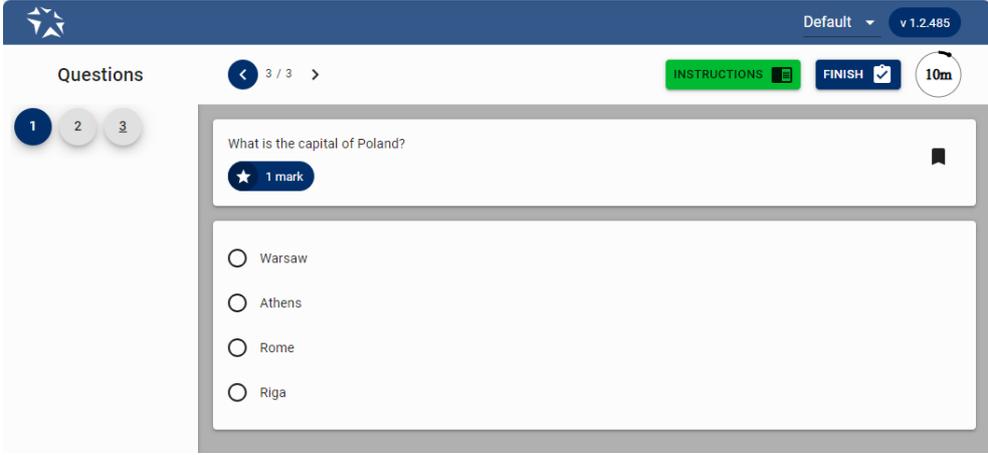
**DO NOT** use circles.

**DO NOT** shade over more than one circle.

1 <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	21 <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	41 <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
2 <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	22 <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	42 <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
3 <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	23 <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	43 <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>



**Always have a go even if you are not sure that it is the correct answer.**

<p>How will the question appear in an online test?</p>	<p>Here is an example of how the question will appear in an online version of the test:</p>  <p>You must <b>select one answer</b> that you think is correct.</p>
<p>Can I take any resources into the exam room?</p>	<p>The test is closed book which means that you cannot refer to reference books or any other materials. You will be provided with stationery on the day. You can take into the exam a scientific non-programmable calculator.</p>
<p>Can I have access to the internet?</p>	<p>No access to the internet is allowed and this means you must not take your SMART watch into the exam room.</p>
<p>How will the multiple-choice test be organised for me?</p>	<p><b>Locations:</b> Your multiple-choice test will take place at your employer’s or training provider’s premises or a suitable venue.</p> <ul style="list-style-type: none"> <li>• You will take the test in a quiet space and in the presence of an invigilator</li> <li>• Your test will be scheduled by your employer or training provider with Energy &amp; Environment Awards</li> <li>• If you fail the multiple-choice test, you can re-sit or re-take the failed test at your employer’s discretion. There are no limits to the number of re-sits or re-takes you can take but it is important to revise and ensure that you are confident with the knowledge you are being tested on</li> </ul>
<p>What criteria will I have to learn?</p> <p><b>AND</b></p>	<p>The multiple-choice test questions are based on core knowledge. Below is a list of the knowledge criteria, assessed in the multiple-choice test along with the range of questions that will be allocated to an assessment paper:</p>

How many questions will be asked on each criteria?	Number of Questions	Criteria
	1 – 3	<b>Core K6:</b> Equipment Life Cycle Considerations
	1 – 3	<b>Core. K7:</b> Maintenance strategies: planned preventative maintenance (PPM), condition-based maintenance (CBM), scheduled maintenance, total productive maintenance (TPM), breakdown and run to failure maintenance.
	1 – 3	<b>Core K8:</b> Health and safety regulations – key features and impact on role: ATEX - safety requirements for workplaces and equipment used in explosive atmospheres, Control of Asbestos Regulations, Control of Major Accident Hazards (COMAH) Regulations, Control of Substances Hazardous to Health (COSHH) Regulations, Dangerous Substances and Explosive Atmospheres Regulations (DSEAR), Display Screen Equipment Regulations (DSE), Health and Safety at Work Act (HASAWA), Lifting Operations and Lifting Equipment Regulations (LOLER), Management of Health and Safety at Work, Manual Handling Operations Regulations, Personal Protective Equipment (PPE) at Work Regulations, Provision and Use of Work Equipment Regulations (PUWER), The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR), Working at Height Regulations, Working in Confined Spaces Regulations, Workplace (health, safety, and welfare) Regulations.
	2 – 3	<b>Core K13:</b> Environmental regulations and standards – impact on role: Environmental Management Systems standard, Environmental Protection Act, and Hazardous Waste Regulations.
1 – 3	<b>Core K17:</b> Algebraic methods. Trigonometric methods and standard formulae to determine areas and volumes. Statistical methods to display data (mean, mode, median). Elementary	

	calculus techniques: coefficient, gradient of a curve, rate of change.
3 – 4	<b>Core K18:</b> Properties of engineering materials and impact on use.
1 – 3	<b>Core K21:</b> Engineering representations, sketches, drawings, and graphical information conventions.
1 – 3	<b>Core K32:</b> Industry 4.0 - the integration of physical systems with internet connectivity and cloud computing: technologies, systems, and benefits.
1 – 2	<b>Core S13:</b> Use mathematical principles and formulae to support engineering maintenance.
<b>Specialist Option: Electrical engineering maintenance technician.</b>	
2 – 3	<b>K33:</b> Electricity at Work regulations. IET wiring regulations
2 – 3	<b>K35:</b> Principles of single phase and three-phase equipment, plant, and systems, the operation of motors and generators, and the use of monitoring and protection equipment.
2 – 3	<b>K36:</b> Electrical engineering principles: circuit terminology, Ohm’s Law, transformer theory, and power calculations.
2 – 3	<b>K37:</b> Functions and applications of electrical circuits.
2 – 3	<b>K38:</b> Types of diagrams used to represent circuits; symbols and abbreviations used to represent components in electrical schematics.
2 – 3	<b>K39:</b> Electrical. Different types of cables; their specifications and application.
<b>Specialist Option: Control and instrumentation engineering maintenance technician.</b>	
2 – 3	<b>K46:</b> Electricity at Work regulations. IET wiring regulations.
2 – 3	<b>K49:</b> Control and instrumentation engineering principles, terminology, and calculations.

	2 – 3	<b>K50:</b> Control and instrumentation equipment installation and connection requirements.
	2 – 3	<b>K51:</b> Principles of control and instrumentation devices: flow, level, pressure, and temperature instruments, analysers, transducers, transmitters, gauges, and pneumatics.
	2 – 3	<b>K52:</b> Open and closed loop systems. First and second order control systems. Proportional–integral–derivative controller (PID controller or three-term controller).
	2 – 3	<b>K53:</b> Functions and applications of instrumentation and control systems: programmable logic controller (PLC), Direct Digital Control (DDC), Distributed Control System (DCS), and Supervisory Control And Data Acquisition (SCADA).
	2 – 3	<b>K54:</b> Types of control and instrumentation diagrams
	<b>Specialist Option: Mechanical engineering maintenance technician.</b>	
	2 – 3	<b>K61:</b> Electricity at Work regulations
	2 – 3	<b>K62:</b> Pneumatic and hydraulic system principles; Air compressors, hydraulic pumps, filters, regulators, lubricators
	2 – 3	<b>K63:</b> Mechanical principles, terminology, and calculations: stress, strains, bending moment, heat transfer, fluid dynamics.
	2 – 3	<b>K64:</b> Functions and application of mechanical aspects of plant and mechanical equipment.
2 – 3	<b>K65:</b> Different types of mechanical fasteners and their uses.	
2 – 3	<b>K66:</b> Types of diagrams used to represent mechanical installations and assemblies; symbols and abbreviations used to represent parts in diagrams.	
	 <b>Remember</b> the questions have been written to reflect the core and specialist option engineering maintenance technician role. For Amplification and Guidance refer to Section 2 of the EMT – Single Discipline Specification. <b>A link to the Specification is available on page 9.</b>	
<b>What should I do to prepare</b>	<b>You should be prepared to:</b> <ul style="list-style-type: none"> <li>• revise the knowledge criteria listed above</li> </ul>	

for the  
multiple-  
choice  
test?

- ask your employer or training provider for additional questions that they have prepared to support you
- attend the multiple-choice test which will last 60 minutes



While on-programme, the employer or training provider must ensure you are:

- familiar with all areas assessed by the multiple-choice test as listed above
- supported in completing a practice test and provide you with constructive feedback to enable you to identify areas you need to carry out further revision in

### Practice Component 3: Multiple-choice test



You should have an opportunity to have a practice multiple-choice test which mirrors the real assessment. The practice multiple-choice test would be set up using the structure in the table above by your employer or training provider. The feedback provided will assist you with preparing for the actual multiple-choice test.

## Overall grading

Your apprenticeship will be graded distinction, merit, pass or fail. The final grade will be determined by collective performance in the three assessment components.

In order to gain a pass, you must achieve a minimum of a pass in each EPA component. A pass represents full competence against the standard.

To achieve a merit, you must achieve a distinction in the observation with questions as a pass in the other assessment components.

To achieve a distinction grade, you must achieve a distinction in the observation with questions and interview based on an EPA portfolio and a pass in the multiple-choice test.

Grades from individual assessment components will be combined in the following way to determine your overall EPA grade as a whole.

The multiple-choice test, observation with questions and interview are all marked separately and awarded a fail, pass or distinction.

The multiple-choice test is based on the mark achieved.

Grade	Minimum marks required	Maximum marks required
Fail	0	27
Pass	28	40

The grade and mark for the observation with questions and interview is based on the number and level of criteria achieved.

The overall grade for the EMT – Single Discipline Standard is based on the grades in individual components as follows:

Observation with questions	Interview based on an EPA portfolio	Multiple-choice Test	Overall grading
Distinction	Distinction	Pass	Distinction
Distinction	Pass	Pass	Merit
Pass	Distinction	Pass	Pass
Pass	Pass	Pass	Pass
Fail	Any grade	Any grade	Fail
Any grade	Fail	Any grade	Fail
Any grade	Any grade	Fail	Fail

The grading descriptors that will be applied for each assessment descriptors along with additional details can be found in Section 3 of this Specification.

## Section 4: Resits and retakes

If you fail one or more EPA component you can re-sit or a re-take the failed component at your employer's discretion. Your employer needs to agree that a re-sit or re-take is appropriate. A re-sit does not need further learning, but a re-take does. You should have a supportive action plan to prepare for your re-sit or re-take.

Your employer and EEA will agree the timescale for your re-sit or re-take. Failed EPA component(s) are typically re-sat or re-taken within 2 months of the end-point assessment (EPA) period fail notification. The timescale for a re-take is dependent on how much re-training is required and is typically taken within 4 months of the EPA outcome notification.

Failed assessment component(s) 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 will not be offered to you if you wish to move from pass to a higher grade:

You will get a maximum EPA grade of a pass if you need to re-sit or re-take one or more assessment methods, unless EEA determines there are exceptional circumstances.

The EEA resit and re-take policy can be found at:

<https://energyenvironmentawards.co.uk/wp-content/uploads/2025/08/Re-sit-and-Re-take-Policy-v-6.0.pdf>

## Section 5: Appendices

Appendix A: Glossary

Appendix B: EPA Portfolio Evidence Log

## Appendix A: Glossary

**Amplification** – provides more detail on how individual knowledge, skills or behaviours statements should be interpreted. Where the KSB statements, themselves are deemed self-explanatory, no amplification is provided. Assessment may include questions on anything identified in the amplification

**Behaviours** – mindsets, attitudes or approaches needed for competence. Whilst these can be innate or instinctive, they can also be learnt. Behaviours tend to be very transferable. They may be more similar across occupations than knowledge and skills. For example, team worker, adaptable and professional

**Elements** – are the knowledge, skills and behaviours and what is needed to competently undertake the duties required for an occupational standard

**Guidance** – is only provided where it is required to support interpretation of the KSB statements

**Gateway** – the stage of the apprenticeship where the apprentice, employer and trainer determine whether the apprentice is ready to undertake the End-Point Assessment

**Independent Assessor** – Will holistically assess the knowledge, skills and behaviours (KSBs) that you have been learnt throughout the apprenticeship. Their role as an Independent Assessor would involve assessing components 1 (observation with questions) and 2 (interview based on an EPA portfolio)

**Knowledge** – the information, technical detail, and ‘know-how’ that someone needs to have and understand to successfully carry out the duties. Some knowledge will be occupation-specific, whereas some may be more generic

**Skills** – the practical application of knowledge needed to successfully undertake the duties. They are learnt through on and/or off-the-job training or experience

**Standard** – An occupational standard is a description of an occupation. It contains occupational profile, and describes KSBs needed for someone to be competent in the occupation’s duties. The occupational standards are developed by employers for occupations that meet the Skills England current criteria. For further details refer to: <https://skillsengland.education.gov.uk/apprenticeships/st1426-v1-0?view=standard>

**Topic** - is a collection of elements grouped into a theme e.g., Health and Safety

## Appendix B: EMT Single Discipline EPA Portfolio Evidence Log

<b>Employer Name</b>	
----------------------	--

<b>Full Name of Apprentice</b>	
<b>The work submitted in this EPA portfolio is my own</b>	<input type="checkbox"/>
<b>Date</b>	

<b>Supervisor/Mentor Name</b>	
<b>The work submitted in this EPA portfolio is the apprentice's own</b>	<input type="checkbox"/>
<b>Date</b>	

Core: Impact of sector on maintenance activities		
<b>Supporting evidence provided (please check box)</b>		<input type="checkbox"/>
Date of activity	Description of evidence	Reference

Please add additional rows if needed

Core: Roles and responsibilities		
<b>Supporting evidence provided (please check box)</b>		<input type="checkbox"/>
Date of activity	Description of evidence	Reference

Please add additional rows if needed

Core: Working sustainability		
Supporting evidence provided (please check box)		<input type="checkbox"/>
Date of activity	Description of evidence	Reference

Please add additional rows if needed

Core: Participating in continuous improvement		
Supporting evidence provided (please check box)		<input type="checkbox"/>
Date of activity	Description of evidence	Reference

Please add additional rows if needed

Core: Teamworking		
Supporting evidence provided (please check box)		<input type="checkbox"/>
Date of activity	Description of evidence	Reference

Please add additional rows if needed

Core: Produce written documents		
Supporting evidence provided (please check box)		<input type="checkbox"/>
Date of activity	Description of evidence	Reference

Please add additional rows if needed

**Core: Digital and information technology**

Supporting evidence provided (please check box)

Date of activity	Description of evidence	Reference

Please add additional rows if needed

**Specialist Option: Electrical Engineering Maintenance Technician -  
Electrical maintenance problem solving and fault-finding.**

Supporting evidence provided (please check box)

Date of activity	Description of evidence	Reference

Please add additional rows if needed

**Specialist Option: Electrical Engineering Maintenance Technician -  
Cable installation and termination.**

Supporting evidence provided (please check box)

Date of activity	Description of evidence	Reference

Please add additional rows if needed

**Specialist Option: Control and Instrumentation Engineering Maintenance Technician - Problem solving and fault-finding.**

Supporting evidence provided (please check box)

Date of activity	Description of evidence	Reference

Please add additional rows if needed

**Specialist Option: Mechanical Engineering Maintenance Technician Mechanical maintenance - Problem solving and fault-finding.**

Supporting evidence provided (please check box)

Date of activity	Description of evidence	Reference

Please add additional rows if needed

**Specialist Option: Mechanical Engineering Maintenance Technician – Bench fitting techniques**

Supporting evidence provided (please check box)

Date of activity	Description of evidence	Reference

Please add additional rows if needed

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