EPA Specification Maintenance and Operations Engineering Technician – Electrical Technician

EPA Specification Section 6 – Practice Assessments and guidance

- Knowledge Assessment
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- Practical Observation
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- Technical Interview

Contacts

This specification has been designed to provide all the advice and guidance you need to prepare yourself and your apprentices for end-point assessment. However, if you have any further questions please contact the EUIAS Help Desk using one of the following:

Help Desk email: enquiries@euias.co.uk

Help Desk telephone: 0121 713 8310

The Knowledge Assessment

Guidance – preparation for the knowledge test

While on-programme, the employer/training provider should brief the apprentice on the areas to be assessed by the knowledge test, as detailed in Section 5.1. These are the Core Knowledge elements of the standard, CK1, CK2, CK3 and CK4. It is good practice to identify the areas within the learning programme where the relevant knowledge is delivered and ensuring that apprentices are aware that these areas “might come up in the test”.

Be aware that the knowledge test relates to the standard, as opposed to the specific job role that the apprentice carries out. The questions have been written to reflect the technician role as a whole and cannot be focussed on specific plant, machinery, or employer-specific processes.

In readiness for end-point assessment, the apprentice should complete a sample test, which is included as an Annex to this specification. This should be undertaken in advance of the Knowledge Assessment, with enough time to mark the assessment, and provide feedback to learners.

For maximum effect, ensure the test is taken in exam conditions similar to those that will be experienced in a live test.

Practical Observation

Guidance for setting up a practice observation

The Practical Observation focuses on **ONE** of the electrical technician skills area; either E1, E2, E3 or E4.

While it is not permitted to brief the apprentice as to the specific task they will be given during the live Practical Observation, it is permitted to set up tasks of similar complexity and duration and ask the apprentice to carry them out under live assessment conditions. To make the practice more realistic, a tutor or supervisor should adopt the role of assessor and use the appropriate grading criteria from Section 5 to ‘assess’ the apprentice.

A practice Task Brief should be prepared that focusses on the specific electrical technician skills area. The practice task brief should provide instructions for the apprentice to be able to:

- Plan the job
- Select the appropriate tools and materials
- Focus on the skill
- Work safely

For example, to focus on skill E1, the task would reference specific electrical plant or equipment, and instruct the apprentice to dismantle, and install parts, consistent with a realistic working task. The task must allow opportunity for the apprentice to position and assemble parts, in accordance with E1. Note that the expectation is that task takes several hours, and up to a day, and therefore must be sufficiently complex to match this duration.

The live Practical Observation also includes questioning from the assessor designed to confirm the apprentice’s understanding of the rationale for actions taken and choices made to complete the task. To carry out this aspect of the practice Practical Observation, it is recommended to prepare some open-ended questions that focus on the rationale for each part of the task.

The tutor or supervisor carrying out the practice assessment should record their assessment of how the apprentice performed and provide feedback to the assessor with guidance on what to do to improve their performance, taking note of the grading descriptors for pass, merit and distinction in Section 5.

Technical Interview

Preparing the evidence portfolio to support the technical interview

The Technical Interview covers a large part of the standard and you should avoid the temptation to allow the portfolio to become very large. It is important to understand that the portfolio is NOT assessed, even though the assessor will review the portfolio prior to the Technical Interview. The portfolio must be submitted to EUIAS at least two weeks before the technical interview.

The purpose of the portfolio is to support the apprentice in providing evidence of their achievements when asked about them in the Technical Interview. It is particularly useful in supporting apprentices in achieving merit or distinction. For example, the Distinction grading criteria for Core Skills CS7 (see Section 5.3) make reference to "taking a lead in accepting additional responsibility" – the portfolio may contain witness testimony describing the circumstances, and the apprentice would be able to refer to this testimony when answering questions during the Technical Interview.

Top tips for the portfolio:

- Include evidence from major maintenance tasks carried out towards the end of the apprenticeship; a continuous narrative through a small number of major tasks is easier to produce and map than a large number of small tasks that have limited coverage of the standard. In many cases, 3-5 substantial tasks should be sufficient to cover all the required elements of the standard

- Organise the evidence for each job according to the following three scenarios:
  - Scenario 1 - Position, assemble, install and dismantle plant and equipment
  - Scenario 2 – Carry out planned, unplanned and preventative maintenance procedures
  - Scenario 3 – Diagnose and determine the cause of faults and Replace, repair and/or remove components and ensure its return to operational condition

- Index the portfolio with clear references to all the required elements, as listed in Section 5.3. Use the MOET Portfolio Index document to summarise all the references, including the portfolio page number, and page section, so the assessor can find the evidence easily

- Evidence can include extracts from work logs, photographs, witness testimony from supervisors, write-ups by the apprentice

- Ensure the apprentice is completely familiar with the portfolio contents and can find particular sections with confidence during an interview situation

- Some apprentices will be aiming for Merit or Distinction - ensure the portfolio addresses the relevant grading criteria

- You can use e-portfolio but you must be able to provide access to the EUIAS assessors

- Use the MOET Portfolio Readiness Checklist as a top-level check list to ensure coverage of all elements of the standard required in the technical interview

Preparing and carrying out a practice Technical Interview

When the evidence portfolio is complete, towards the end of the formal training period is a good time to schedulea practice interview. It must be done with enough time to provide feedback to the apprentice that they can learn from, before the live end-point assessment. A period of two weeks or more is recommended, depending on the circumstances. The key is that the apprentice has time to act on the feedback they get at the end of the practice.

A period of at least two hours should be set aside for each practice interview, and a set of open-ended questions prepared to cover each of the areas of the standard covered by the Technical Interview.

A tutor or supervisor should play the part of the assessor carrying out the Technical Interview, asking the questions in a 'live test environment'. They should record their assessment of the apprentice performance, using the grading descriptions in Section 5 as a guide, and provide the apprentice with feedback, focussing on areas of improvement.

The technical interview questioning should synoptically examine the knowledge, skills and behaviours by the apprentice through their on-programme experience. The questioning should be contextualised to the apprentice's specific job role. The tutor or supervisor must:

- prepare some interview questions around each of the three question scenarios described in section 5.3, and focused on each of the relevant knowledge or skills covered by the technical interview
- don't forget to ask questions relating to merit and distinction criteria
- use various questioning techniques to confirm the depth of knowledge and or range of skills
- record the technical interview or provide a clear narrative if the interview is not recorded. The narrative must describe the apprentice's responses to each of the questions asked. The narrative must capture the depth and breadth of the apprentice's response
- ensure the apprentice has provided evidence in their responses to cover all the relevant elements of the standard
- provide feedback to the apprentice focusing on any areas of the standard missed, or where appropriate, to give guidance on achieving the merit or distinction grades