



ENERGY & UTILITIES
INDEPENDENT
ASSESSMENT SERVICE

Skills for a greener world

Is MOET the right standard for your apprentice?

5 questions to help you decide





Is MOET the right standard for your apprentice?

The Maintenance and Operations Engineering Technician standard, commonly known as 'MOET', has been around since 2016 and is currently undergoing a review as part of the Institute for Apprenticeships and Technical Education's route review of engineering and manufacturing standards.

However, the review will not be complete for some time and we will be living with the existing standard (ST0154, version 1.1) and the existing assessment plan (AP02) for some time to come. Over the years it has proved very popular and currently there are six end-point assessment organisations (EPAOs) offering this standard listed on the Register of EPAOs (July 2021 version), including the EUIAS.

However, it is fair to say that the appeal of this standard has now extended beyond the footprint originally intended when the first trailblazer group got together

to create the standard and assessment plan. In early trailblazer meetings, the focus was on maintenance roles within power generation before the remit was broadened. The standard states that it is for "Industries that are part of or have activities that are part of the broader national infrastructure Engineering Sector" and goes on to specify:

- the electricity generating environment
- telecommunications
- power plants
- oil and gas refining

- nuclear waste reprocessing
- processing and production of chemicals
- pharmaceuticals
- human and animal food
- cosmetics
- petrochemicals
- sewerage
- the exploration and exploitation of oil and gas.

While many of our customers do fit this profile, we have plenty of customers that are not really part of the 'national infrastructure' and we continue to have enquiries from a range of sectors.

The appeal is clear to see. The apprenticeship is funded at £26,000 and has seven pathways that include some very generic-sounding specialisms such as electrical, mechanical, and electromechanical as well as control and instrumentation. For EUIAS, these are the most popular pathways.

The MOET assessment plan does not include any prescribed qualifications that might give a provider pause for thought. This is in marked contrast to, for example, the Engineering Technician apprenticeship, another level 3 standard in the same broad area, which has a range of mandatory qualifications across 13 occupational roles.

The development of the standard and assessment plan was supported by the Institution of Mechanical Engineers (IMechE) and Institution of Engineering and Technology (IET) and “apprentices who qualify in maintenance & operations engineering hold eligibility for registration as Engineering Technicians (EngTech).” (MOET Assessment Plan ST0154/AP02.)

The elements of the MOET standard and assessment plan that provide the detail of the knowledge, skills and behaviours are worded in a very general manner, for example the core technical knowledge only

has four elements, one of which is “the relevant engineering theories and principles relative to their occupation”. (There is an exception to this, within the Plant Operations pathway. For this pathway, the standard adds in a further seven elements including “understand complex thermal, chemical, mechanical and electrical energy conversion processes”. For EUIAS, Plant Operations is the least popular pathway.) Notwithstanding the plant operations pathway, it is very easy to see how the MOET standard might appear to be all things to all people.

If we accept that apprentices don’t necessarily have to be working as part of ‘the national infrastructure’, how do you decide if the MOET standard is the right standard for your apprentices? Because while this standard does tick a lot of boxes for many employers, there are still some aspects that can be overlooked. We ask potential customers to think about the following five questions before registering apprentices with us on this standard.

1) Have you read the standard and the assessment plan and confirmed that the knowledge, skills and behaviours will be covered in depth in the off-the-job training?

This should be your starting point, and the standard and assessment plan can be found [here](#).

2) Is the job role wholly or mainly based around maintenance?

For MOET, the clue is in the title. The apprentice should be maintaining plant and equipment that is in use, typically in a manufacturing or engineering environment. Maintenance should include planned and unplanned maintenance.

3) Is the apprentice largely engaged in installation, testing, servicing, removal, replacement, maintenance and fault finding on relevant plant and equipment?

These are the main features of the job role for which the standard is intended.

4) Is there three years’ worth of training for the job?

The MOET standard is for maintaining substantial and complex plant and equipment that is in constant, or near-constant, use. Apprentices will be familiar with the whole life cycle of the plant and equipment they are maintaining. If the training does not need to last for three years or thereabouts, it is likely that the role is not sufficiently complex.

5) Can the apprentice undertake a practical assessment task that is ‘typically no longer than one day’?

The end-point assessment includes a substantial practical assessment task, devised by the employer, and carried out on site, or in a realistic working environment. The practical assessment task must give the apprentice the opportunity to demonstrate the range of knowledge and skills from the MOET standard, including the chance to achieve the higher grades of Merit and Distinction. If the practical assessment task is over and done within a few hours, it is too short and not suitable for the MOET standard. It is also not acceptable to devise a practical assessment task that is essentially the same set of activities repeated several times to make it last longer.

If the answer to any of these five questions is “No” then the MOET standard is not the right standard for your apprentice.

In addition, it is worth checking out other maintenance standards that might be a better fit, before opting for the MOET standard. These include:

- Food and Drink Maintenance Engineer
- Motorcycle technician
- Science Industry maintenance technician
- Property Maintenance Operative
- Motor Vehicle (light and heavy)
- Construction Equipment (in development)
- Engineering Technician

From the EPAO point of view, the very general nature of the wording in the MOET standard and assessment plan presents a challenge given the primary requirement of an assessment to deliver a standard that is the same for all apprentices. When the review of MOET is complete, we will no doubt have more detail that will help employers and providers make their decisions. In the meantime, and for some time to come, the current standard and assessment plan will be used by many hundreds of apprentices. They are much more likely to be on the right apprenticeship if the answer to the five questions above is ‘yes’.

Your next step should be to look at what resources are available from your EPAO. EUIAS provides a detailed specification for the MOET standard that includes amplification and guidance of the knowledge, skills and behaviours as well as guidance on preparing for the end-point assessments and other resources. EUIAS also provides a free service of reviewing proposed practical assessment tasks to help employers/providers ensure they have the potential to allow apprentices to demonstrate the required knowledge, skills and behaviours.

Find our resources [here](#).



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Energy & Utility Skills Limited

Avon House, 435 Stratford Road, Shirley, Solihull, B90 4AA

T 0121 713 8255 E communications@euskills.co.uk