

Level 3 Maintenance and Operations Engineering Technician (MOET)

End Point Assessment (EPA) Specification



Why choose NSAN as your End Point Assessment Organisation (EPAO)?

NSAN is led by nuclear sector employers, from both civil and defence, who live and breathe the skills needed in the whole of the UK nuclear industry, and with client engagement at the heart of everything we do.

As a trusted and respected organisation leading skills delivery in the nuclear industry, we harmonise internal staff expertise with standard-specific subject matter experts from across the nuclear industry to develop and deliver our EPA.

As an approved EPAO for the nuclear industry since 2017, we have the expertise to ensure that you will be fully supported with navigating the EPA process and can be assured your apprentices are being tested against the latest industry standards.

What's involved in the MOET EPA?

There are 3 stages to the MOET EPA:

NSAN provides EPA for the following pathways on the MOET standard:

- Electrical Technician
- Mechanical Technician
- Control and Instrumentation Technician

Stage 1 – Knowledge test

A 45-minute scenario-based knowledge assessment consisting of 30 multiple choice questions, enabling apprentices to demonstrate core technical knowledge across the MOET standard.

Stage 2 – Practical observation

A practical observation relative to the specific role the apprentice is working towards. The duration of this activity will be based on the comparable time that an industry competent worker would take to achieve successful task(s) completion but will typically be no longer than one day.

Stage 3 – Technical interview, supported by a portfolio of evidence

An interview which will typically take 2-2.5 hours. Conducted by a panel of two technical experts - one of whom will be a senior expert - the interview will consist of three scenario question areas synoptically examining knowledge, skills and behaviours, which will be based on the contents of the evidence portfolio compiled throughout the apprenticeship.

How long does the MOET EPA take?

The MOET apprenticeship will typically take 36-42 months to complete, with the EPA typically being taken within the last 6 months. The EPA must conclude within 6 months of commencement.

What criteria does the EPA test the apprentice on and how will they be assessed?

The MOET standard is broken down into three main areas: knowledge, skills and behaviours (KSBs). Within the KSBs, there are 19 mandatory core competencies – 4 Knowledge-based, 8 Skills-based, 7 Behaviours-based. In addition to the core competencies, the apprentice must also achieve one of the specific Skills-based competencies, relevant to their chosen pathway.

The right-hand columns show which assessment method(s) will be used to ensure a synoptic approach to assessment:

KEY	KT - Knowledge Test PO - Practical Observation TI - Technical Interview
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Ref	Core Behaviours	KT	PO	TI
B1.	Health and Safety: Follows health and safety policies and procedures and be prepared to challenge unsafe behaviour using appropriate techniques to ensure the protection of people and property when working alone and/or with appropriate supervision.		✓	
B2.	Quality focused: Ensures that work achieves quality standard both occupationally and personally.		✓	
B3.	Working with others: Has the ability to work well with people from different disciplines, backgrounds and expertise to accomplish an activity safely and on time.		✓	
B4.	Interpersonal skills: Gets along well with others and takes into account their needs and concerns.		✓	
B5.	Critical reasoning: Uses resources, techniques and obtained facts to develop sound solutions while recognising and defining problems.			✓
B6.	Sustainability and ethical behaviour: Behaves ethically and undertakes work in a way that contributes to sustainable development.		✓	
B7.	Risk awareness: Demonstrates high concentration, the desire to reduce risks, ability to be compliant and awareness of change, through regular monitoring and checking of information.		✓	

Ref	Core Knowledge Competencies	KT	PO	TI
K1.	First principles relating to the operation and maintenance of appropriate plant and equipment.	✓		✓
K2.	Relevant industry health and safety standards, regulations, and environmental and regulatory requirements.	✓		✓
K3.	Maintenance and operational practices, processes and procedures covering a range of plant and equipment.	✓		✓
K4.	The relevant engineering theories and principles relative to their occupation.	✓		✓

Ref	Core Skills Competencies	KT	PO	TI
S1.	Comply with industry health, safety and environmental working practices and regulations PO.		✓	
S2.	Locate, and rectify faults on plant and equipment.		✓	✓
S3.	Communicate with and provide information to stakeholders in line with personal role and responsibilities.		✓	
S4.	Read, understand and interpret information and work in compliance with technical specifications and supporting documentation.		✓	✓
S5.	Prepare work areas to undertake work related activities and reinstate those areas after the completion of the work-related activities.		✓	
S6.	Inspect and maintain appropriate plant and equipment to meet operational requirements.		✓	✓
S7.	Assess and test the performance and condition of plant and equipment.		✓	
S8.	Communicate, handover and confirm that the appropriate engineering process has been completed to specification.		✓	✓
Pathway 1 - Electrical Technician Skills (one skill to be assessed)				
P1.S1	Position, assemble, install and dismantle electrical plant and equipment to agreed specifications.		✓	✓
P1.S2	Carry out planned, unplanned and preventative maintenance procedures on electrical plant and equipment.		✓	✓
P1.S3	Replace, repair and/or remove components in electrical plant and equipment and ensure its return to operational condition		✓	✓
P1.S4	Diagnose and determine the cause of faults in electrical plant and equipment.		✓	✓
Pathway 2 - Mechanical Technician Skills (one skill to be assessed)				
P2.S1	Position, assemble, install and dismantle mechanical plant and equipment to agreed specifications.		✓	✓
P2.S2	Carry out planned, unplanned and preventative maintenance procedures on mechanical plant and equipment.		✓	✓
P2.S3	Replace, repair and/or remove components in mechanical plant and equipment and ensure its return to operational condition.		✓	✓
P2.S4	Diagnose and determine the cause of faults in mechanical plant and equipment.		✓	✓
Pathway 3 - Control and Instrumentation Technician Skills (one skill to be assessed)				
P3.S1	Position, assemble, install and dismantle plant and equipment to agreed specifications.		✓	✓
P3.S2	Carry out planned, unplanned and preventative maintenance procedures on plant and equipment.		✓	✓
P3.S3	Replace, repair and/or remove components in plant and equipment and ensure its return to operational condition.		✓	✓
P3.S4	Diagnose and determine the cause of faults in plant and equipment.		✓	✓
P3.S5	Calibrate and configure instrument and control systems		✓	✓

What does the apprentice need to do to prepare for the MOET EPA?

Throughout the apprenticeship the apprentice is required to gather sufficient evidence, in the form of a portfolio, to allow them to consistently demonstrate knowledge, skills and behaviours as described in the standard. The portfolio can be finalised during the EPA period and will be used to support the Technical Interview.

Before taking the EPA, the apprentice will also need to meet the requirements of the Gateway.

What are the requirements of the MOET Gateway?

Prior to the EPA the employer and provider will confirm that the apprentice has satisfactorily met the on-programme training requirements and has achieved mandatory gateway requirements for EPA.

The mandatory requirements are:

- a declaration of readiness, signed by the apprentice, employer and training provider
- a completed 'Proposed Task for Practical Observation' form
- confirmation that you have gathered sufficient portfolio evidence, to be finalised during the EPA period

If the apprentice was aged under 19 on the start date of their apprenticeship, they will **also** need to provide:

- evidence of achievement of Level 2 (or equivalent) maths and English

How is the MOET EPA graded?

The EPA is graded as Pass, Merit, Distinction or Fail. The final grade will be determined by collective performance in the three assessment methods in the EPA, based on a points system.

The grid below shows the minimum grades that must be achieved in each of the methods to be awarded the final grade.

EPA Method	Grade		
Knowledge Test	Pass	Pass	Merit
Observation	Pass	Merit	Distinction
Interview	Pass	Merit	Distinction
Final Grade Awarded	Pass	Merit	Distinction

If the result of any assessment is Fail, the overall result will be Fail.

How much does the MOET EPA cost?

£3200. This is a fixed cost, which covers the full EPA process including planning, guidance, development, delivery, assessor expenses and certification.

Fees are payable at three points of the EPA.

- 10% non-refundable deposit at contract agreement.
- 70% at gateway.
- 20% on completion of the first attempt at the final method of assessment.

Progression route – where can it lead?

Apprentices who achieve the MOET EPA are eligible to apply for registration as Engineering Technicians (EngTech) and may do so by submitting an application to their chosen Professional Institution.