

# Dual Fuel Smart Meter Installer (Gas and Electricity) Portfolio and Grading Guidance

## Overview

It is a requirement of the dual fuel smart meter installer (electricity and gas) apprenticeship that each apprentice compiles a portfolio of evidence during the on-programme period of his or her apprenticeship. The portfolio, which may be in a paper and or electronic format, will contain a work log of evidence of the range of smart metering experience and work carried out by the apprentice both in the workplace and simulated environments during the course of their on-programme learning.

End-point assessment will typically take place during the final three months of their apprenticeship.

## Grading Overview

Portfolio Points	Grade
≤64	Fail
65- 84	Pass
85-100	Distinction

## Portfolio Requirements

The evidence collectively must demonstrate competence against all aspects of the apprenticeship standard in terms of the required skills, knowledge and behaviours. Suitable and sufficient evidence must be gathered during the on-programme period to evidence the knowledge, skills and behaviours required to meet the published standard:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/455239/ENERGY\\_UTILITIES\\_Dual\\_Fuel\\_Smart\\_Meter\\_Installer.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/455239/ENERGY_UTILITIES_Dual_Fuel_Smart_Meter_Installer.pdf)

This evidence is essential in confirming that an apprentice is eligible to enter end-point assessment.

In addition, to be eligible to enter end-point assessment, the apprentice must:

- a) Achieve as a minimum functional skills Level 1 English and mathematics
- b) Achieve Gas Safe® registration
- c) Achieve MOCOPA® registration
- d) Complete a satisfactory final progress review
- e) Not be subject to a company disciplinary procedure

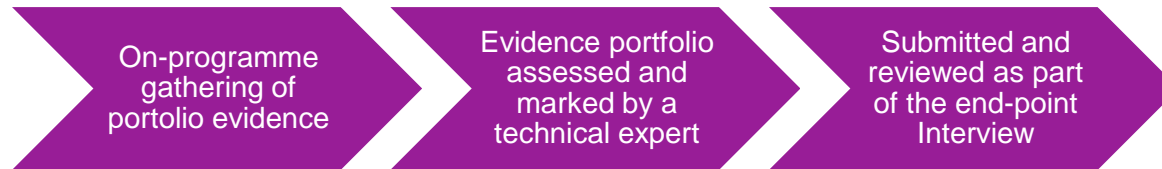
It is expected that each apprentice's portfolio will also contain the final workplace observation (Pass / Fail) together with a range of evidence which may include personal accounts, photographs, witness statements, job sheets, risk assessments, behavioural reviews and reflective journals.

During the end-point assessment period, each apprentice's portfolio will be assessed and marked by a technical expert who has been appointed by the assessment organisation but nominated by the employer. The technical expert will establish a final preliminary mark for the portfolio evidence out of 100 using the standardised assessment criteria and documentation issued by the EUIAS (see Annex 2). The assessment mark awarded to the portfolio will contribute to the final grading of the apprenticeship, this being either Fail, Pass or Distinction. The grading for each end-point assessment tool is weighted (80% portfolio and 20% end-point interview).

Only the external examiner appointed by the EUIAS can confirm the final grade.

Once a final grade has been confirmed by the external examiner the EUIAS will then apply for the final apprentice certificate.

## Summary of Evidence Portfolio Process



Final grading weighted = 80% portfolio & work observation 20% end-point interview

## Portfolio Assessment Requirements

The assessment of the portfolio can only occur after completion of the work place observation and before the end-point interview. The portfolio's assessment must meet the following requirements:

1. The portfolio's summative assessment must be carried out by a technical expert (*see definition below*) who has not directly worked with the apprentice or participated in their learning and training
2. The technical expert will use the standardised assessment criteria and documentation provided by the EUIAS to award a preliminary mark out of 100 and record the outcome of the portfolio assessment (Annex 2)
3. The portfolio will be attributed points as defined in the published assessment plan and outlined in the overview. The portfolio carries a weighting of 80% of the total apprenticeship
4. An apprentice who achieves a portfolio assessment mark of 64 or below must not be allowed to proceed to the end-point interview, but must receive a remedial action plan clearly indicating the work to be undertaken before being considered for re-assessment

## Technical Expert

The term technical expert is defined in the published assessment plan as:

*“Nominated by the apprentice’s employer; they may come from within their own organisation or brought in if required from other employers or an assessment organisation. They will not have directly worked with the apprentice or participated in their learning and training. Technical experts must be able to demonstrate an appropriate level of competence i.e. training and experience to undertake the role and / or hold or be working towards an assessor qualification. They must be approved by the assessment organisation for the purposes of conducting the end-point assessment.”*

## Technical Expert Approval

The EUIAS will conduct a 100% desktop evaluation of the proposed technical expert CV and assign a risk rating. This risk rating will determine the EUIAS approach to audit during the end-point period, with 20% of technical experts subject to an EUIAS observation of end-point assessment in action by a particular expert. Experts will be notified by the EUIAS if they are selected for audit. Any assessment infringements will be subject to automatic audit in subsequent cohorts. (For more information, please view the EUIAS risk rating of technical experts and assessors).

Following the assessment and preliminary grading of the apprentice’s portfolio, the portfolio and grading grid (Annex 2) will be made available to the technical expert conducting the end-point interview. The technical expert conducting the interview will develop and direct their interview questioning in terms of the evidence of skills, knowledge and behaviours contained in the portfolio, for example, it may be related to a specific job or situation that the apprentice has faced such as managing a vulnerable customer or in relation to a particular fault.

## Annex 1 - Portfolio Grading Criteria within the Published Assessment Plan

To achieve a 'Pass' the apprentice will demonstrate complete competence across the whole standard. To achieve 'Distinction' the apprentice will demonstrate exemplary performance that provides evidence of performance over and above the standard. The following table outlines the scoring criteria that must be applied; detailed guidance will be developed by the assessment organisations (Annex 2).

Fail Criteria	Pass Criteria	Distinction Criteria
<p><b>Fail &lt;65</b></p> <ul style="list-style-type: none"> <li>Portfolio lacks sufficient evidence and structure to demonstrate knowledge, skills and behaviours through the work observation, progress reviews across the programme, compliance, productivity, completion against recall rate, customer satisfaction indicators</li> <li>Portfolio records a Fail in Gas Safe registration</li> <li>Portfolio records a Fail in MOCOPA</li> <li>Poor application of knowledge in the work place</li> </ul>	<p><b>Pass (65-84)</b></p> <ul style="list-style-type: none"> <li>Portfolio well- structured and contains sufficient and robust evidence to demonstrate knowledge, skills and behaviours across the standard through work observation, progress reviews across the programme, compliance, productivity, completion against recall rate, customer satisfaction indicators</li> <li>Portfolio records a Pass in Gas Safe registration</li> <li>Portfolio records a Pass in MOCOPA</li> </ul>	<p><b>Distinction (85-100)</b></p> <ul style="list-style-type: none"> <li>The portfolio demonstrates evidence which is over and above the requirements of the standard through work observation, progress reviews across the programme, compliance, productivity, completion against recall rate, customer satisfaction indicators</li> <li>Portfolio records a Pass in Gas Safe registration</li> <li>Portfolio records a Pass in MOCOPA</li> <li>Outstanding application of knowledge in the work place</li> </ul>
<ul style="list-style-type: none"> <li>Poor critical reasoning skills displayed on practical tasks</li> <li>Negative team working and interpersonal skills</li> <li>Subject to a company disciplinary procedure</li> </ul>	<ul style="list-style-type: none"> <li>Good application of knowledge in the work place</li> <li>Good critical reasoning skills displayed on practical tasks</li> <li>Good team working and interpersonal skills and ability to respect the opinion of others</li> </ul>	<ul style="list-style-type: none"> <li>High level of critical reasoning skills displayed on practical tasks</li> <li>Outstanding team and interpersonal skills and the ability to respect the opinion of others</li> </ul>

## Annex 2 - End-point Assessment – Portfolio Grading Guidance and Marking Sheet

Apprentice Name	
Apprentice's Employer	
Portfolio Assessment Date	
Portfolio Assessment Location	
Portfolio Assessor's Details (Name, Employer, job role, and contact details)	

Portfolio Assessment Outcome (fail / pass / distinction)	
Assessor summary	
Action Plan if the apprentice does not achieve a pass or distinction	

Apprentice Signature	
Date	

Portfolio Assessor Signature	
Date	

Portfolio Evidence	Maximum points per section	Minimum points required to achieve a Pass	Minimum points required to achieve Distinction
	10	6	8
		To achieve a Pass the apprentice must have evidence of satisfactory completion of unit “Working Safely in the Energy and Utilities Sector”.	To achieve Distinction the apprentice must have evidence of satisfactory completion of unit; “Working Safely in the Energy and Utilities Sector” and evidence shows the apprentice understands the wider ranging consequences of not following regulations and codes of practice.
Current Health, Safety and Environmental legislation and regulations applicable to work in the gas and power industries.	ASSESSORS SCORE and COMMENTS		

Portfolio Evidence	Maximum points per section	Minimum points required to achieve a Pass	Minimum points required to achieve Distinction
	10	7	8
		To achieve a Pass the apprentice must have evidence of satisfactory completion of units; prepare, install and commission low pressure natural gas smart meter and regulator up to 6.0m <sup>3</sup> /hr. and low pressure gas smart meter tightness testing and direct purging and install single phase meter and associated equipment.	To achieve Distinction the apprentice must have evidence of satisfactory completion of the units listed under the Pass criteria and evidence shows an in depth understanding of where the condition of equipment and installation fails to meet the required standard and the actions to be taken in the event of such non-compliance.
Gas and electrical testing and assessment procedures needed to establish the condition of the equipment and installation and the actions needed as a result.	ASSESSORS SCORE and COMMENTS		



Portfolio Evidence	Maximum points per section	Minimum points required to achieve a Pass	Minimum points required to achieve Distinction
<p>Gas and electrical theories and procedures involved in the practical application of installation, exchange, commission, decommission and maintenance of smart metering systems and associated equipment and communication systems.</p>	8	4	5
		<p>To achieve a Pass the apprentice must have evidence of satisfactory completion of units; “Working Practices in the Energy and Utilities Sector” and prepare, install and commission low pressure natural gas smart meter and regulator up to 6.0m<sup>3</sup>/hr. and low pressure gas smart meter tightness testing and direct purging and install single phase meter and associated equipment.</p>	<p>To achieve Distinction the apprentice must have evidence of satisfactory completion of the units listed under the Pass criteria and evidence shows a good knowledge of the installation requirements of both gas and electrical installation and any connected equipment. They shall consistently demonstrate excellent understanding of what constitute; faults or hazards, and have evidence of applying, suitable practices to make these safe, in line with industry requirements.</p>
	<p>ASSESSORS SCORE and COMMENTS</p>		

Portfolio Evidence	Maximum points per section	Minimum points required to achieve a Pass	Minimum points required to achieve Distinction
Relevant electrical / mechanical principles and how they are applied in work processes and procedures.	3	1	2
		To achieve a Pass the apprentice must have evidence of satisfactory completion of units; “Working Practices in the Energy and Utilities Sector” and “Prepare, Install and Commission Low Pressure Natural Gas Smart Meter and Regulator up to 6.0m <sup>3</sup> /hr. and Low Pressure Gas Smart Meter Tightness Testing and Direct Purging and Install Single Phase Meter and Associated Equipment and Change Single Phase Meter and Associated Equipment.”	To achieve Distinction the apprentice must have evidence of satisfactory completion of the units listed under the Pass criteria and evidence shows that they understand the operating parameters of any connected equipment and an explanation of how such equipment works.
	ASSESSORS SCORE and COMMENTS		

Portfolio Evidence	Maximum points per section	Minimum points required to achieve a Pass	Minimum points required to achieve Distinction
Up to date knowledge of energy efficiency principles to be able to provide advice and guidance to the customer.	3	1	2
		To achieve a Pass the apprentice must have evidence of satisfactory completion of units “Using and Communicating Technical Information in the Energy and Utilities Sector”. Evidence must be provided which demonstrates the apprentice’s knowledge of energy efficiency.	To achieve Distinction the apprentice must have evidence of satisfactory completion of the units listed under the Pass criteria and evidence shows that they are able to accurately explain such principles to the assessor / work place observer or consumer.
	ASSESSORS SCORE and COMMENTS		

Portfolio Evidence	Maximum points per section	Minimum points required to achieve a Pass	Minimum points required to achieve Distinction
<p>Knowledge of smart metering systems to be able to discuss and advise the customer.</p>	3	1	2
		<p>To achieve a Pass the apprentice must have evidence of satisfactory completion of units “Using and Communicating Technical Information in the Energy and Utilities Sector”.</p>	<p>To achieve Distinction the apprentice must have evidence of satisfactory completion of the units listed under the Pass criteria and evidence shows an outstanding application of their ability to communicate of their knowledge, at an appropriate level, to the consumer, so that the consumer fully understands the principle involved.</p>
	<p>ASSESSORS SCORE and COMMENTS</p>		

Portfolio Evidence	Maximum points per section	Minimum points required to achieve a Pass	Minimum points required to achieve Distinction
<p>Current regulatory compliance, the recognition of different customer needs including vulnerability as defined by Office of Gas and Electricity Markets (OFGEM) and Smart Installation Codes of Practice (SMICoP) company rules, policies and procedures as defined by the employer.</p>	3	1	2
		<p>To achieve a Pass the apprentice must have evidence to demonstrate understanding of current regulatory compliance and the recognition of different customer needs.</p>	<p>To achieve a Distinction the apprentice must have evidence to demonstrate understanding of current regulatory compliance, the recognition of different customer needs and evidence of applying this knowledge in the work place.</p>
	<p>ASSESSORS SCORE and COMMENTS</p>		

Portfolio Evidence	Maximum points per section	Minimum points required to achieve a Pass	Minimum points required to achieve Distinction
Carry out a thorough and rigorous risk assessment to ensure safety of customer, self and property on arrival, during install and upon exit.	5	4	5
		To achieve a Pass the apprentice must have evidence of satisfactory completion of unit “Working Safely in the Energy and Utilities Sector”; this must have been conducted in the workplace.	To achieve Distinction the apprentice must have evidence of satisfactory completion of unit “Working Safely in the Energy and Utilities Sector” and shall be able to highlight other risks that may exist in other situations and demonstrate how to mitigate such risk in a safe and efficient manner.
	ASSESSORS SCORE and COMMENTS		

Portfolio Evidence	Maximum points per section	Minimum points required to achieve a Pass	Minimum points required to achieve Distinction
Take personal responsibility for maintaining safety standards and achieving job objectives.	5	4	5
		To achieve a Pass the apprentice must have evidence of satisfactory completion of units “Working Practices in the Energy and Utilities Sector” and “Working Safely in the Energy and Utilities Sector” and “Using and Communicating Technical Information in the Energy and Utilities Sector.”	To achieve Distinction the apprentice must have evidence of satisfactory completion of the units listed under the Pass criteria and evidence shows a consistent approach to the safety and well-being of any persons affected by the task. Shall also have evidence of effectively communicating this.
	ASSESSORS SCORE and COMMENTS		

Portfolio Evidence	Maximum points per section	Minimum points required to achieve a Pass	Minimum points required to achieve Distinction
	3	2	3
		To achieve a Pass the apprentice must have evidence of satisfactory completion of units; “Working Practices in the Energy and Utilities Sector” and “Working Safely in the Energy and Utilities Sector.”	To achieve Distinction the apprentice must have evidence of satisfactory completion of the units listed under the Pass criteria and evidence shows they understand to specification for tools and equipment and offer examples of the limitation of use of such equipment. The equipment they use shall be maintained to a high standard and stored in a neat and organised way.
Use tools, equipment and personal protective equipment in a safe and appropriate manner.	ASSESSORS SCORE and COMMENTS		



Portfolio Evidence	Maximum points per section	Minimum points required to achieve a Pass	Minimum points required to achieve Distinction
Install, exchange, commission, decommission and on-going maintenance of Smart metering systems, associated equipment and communication systems in accordance with industry standards.	10	7	8
		To achieve a Pass the apprentice must have evidence of satisfactory completion of units; prepare, install and commission low pressure natural gas smart meter and regulator up to 6.0m <sup>3</sup> /hr. and low pressure gas smart meter tightness testing and direct purging and install single phase meter and associated equipment.	To achieve Distinction the apprentice must have evidence of satisfactory completion of the units listed under the Pass criteria and evidence shows an orderly and neat and tidy approach to their work. Any cables or pipework or equipment is installed shall be to exacting specifications, with accurate bends, joints made to exceptional quality standards.
	ASSESSORS SCORE and COMMENTS		

Portfolio Evidence	Maximum points per section	Minimum points required to achieve a Pass	Minimum points required to achieve Distinction
<p>Work with focus and clear purpose in all conditions and locations, covering business requirements, usually working alone and safely adapt working methods to reflect changes in working environments.</p>	2	1	2
		<p>To achieve a Pass the apprentice must have evidence of satisfactory completion of units; “Working Practices in the Energy and Utilities Sector” and “Working Safely in the Energy and Utilities Sector.”</p>	<p>To achieve Distinction the apprentice must have evidence of satisfactory completion of the units listed under the Pass criteria and evidence shows they are able to articulate these requirements and demonstrate to a high standard the application of such measures.</p>
	<p>ASSESSORS SCORE and COMMENTS</p>		

Portfolio Evidence	Maximum points per section	Minimum points required to achieve a Pass	Minimum points required to achieve Distinction
	2	1	2
		To achieve a Pass the apprentice must have evidence of satisfactory completion of units; “Delivering Customer Service When Working Within the Energy and Utilities Sector” and “Working Practices in the Energy and Utilities Sector” and “Working Safely in the Energy and Utilities Sector.”	To achieve Distinction the apprentice must have evidence of satisfactory completion of the units listed under the Pass criteria and evidence shows an outstanding application of care and attention to customers’ property, ensuring the customer and others affected by the works are fully aware of any safety implications during the work activity.
Work on customer premises / property showing appropriate care, respect whilst focusing on safety.	ASSESSORS SCORE and COMMENTS		

Portfolio Evidence	Maximum points per section	Minimum points required to achieve a Pass	Minimum points required to achieve Distinction
Use a variety of appropriate communication methods to interact with customers and others to give / receive information accurately, in a timely and positive manner in order to deliver the best possible experience to customers. This will include practical advice and the benefits of using the equipment.	2	1	2
		To achieve a Pass the apprentice must have evidence of satisfactory completion of units; “Delivering Customer Service When Working Within the Energy and Utilities Sector” and “Using and Communicating technical Information in the Energy and Utilities Sector.”	To achieve Distinction the apprentice must have evidence of satisfactory completion of the units listed under the Pass criteria and evidence shows they conduct themselves in a professional and courteous manner. Evidence of “excellence” from customer feedback.
	ASSESSORS SCORE and COMMENTS		

Portfolio Evidence	Maximum points per section	Minimum points required to achieve a Pass	Minimum points required to achieve Distinction
<p>Achieve individual and team tasks which align to overall work objectives, be self-motivated and disciplined in the approach to work tasks.</p>	3	2	3
		<p>To achieve a Pass the apprentice must have continually displayed a satisfactory approach to the achievement of work objectives with acceptable levels of self-motivation and discipline.</p>	<p>To achieve Distinction the apprentice must have continually displayed an outstanding approach to the achievement of work objectives with excellent levels of self-motivation and discipline.</p>
	<p>ASSESSORS SCORE and COMMENTS</p>		

Portfolio Evidence	Maximum points per section	Minimum points required to achieve a Pass	Minimum points required to achieve Distinction
<p>Prepare and sequence equipment and tasks in the order prescribed in relevant operational standards or according to a specific regulations or set of rules.</p>	3	2	3
		<p>To achieve a Pass the apprentice must have evidence of satisfactory completion of units; prepare, install and commission low pressure natural gas smart meter and regulator up to 6.0m<sup>3</sup>/hr. and low pressure gas smart meter tightness testing and direct purging and install single phase meter and associated equipment.</p>	<p>To achieve Distinction the apprentice must have evidence of satisfactory completion of the units listed under the Pass criteria and evidence shows an excellent approach to their work. They are consistently neat and tidy, have an orderly and methodical approach to their work setting an example for others to follow.</p>
	<p>ASSESSORS SCORE and COMMENTS</p>		

Behaviours	Maximum points per section	Minimum points required to achieve a Pass	Minimum points required to achieve Distinction
Have personal wellbeing and the safety of customers and others as a priority.	5	4	4
		To achieve a Pass the apprentice must have evidence that shows due regard for the personal wellbeing of customers and others. This being observed either as part of an assessment unit or through other workplace observation or witness testimony.	As per Pass criteria.
	ASSESSORS SCORE and COMMENTS		

Behaviours	Maximum points per section	Minimum points required to achieve a Pass	Minimum points required to achieve Distinction
	5	4	5
		To achieve a Pass the apprentice must have evidence that shows they operate in self-regulated safety culture, in accordance with appropriate rules and regulation.	To achieve a Distinction the apprentice must have evidence that shows they operate in self-regulated safety culture, in accordance with appropriate rules and regulation and that they actively convey such a culture to others.
Be risk aware showing the desire to reduce risks through systematic monitoring and checking information and the strict compliance with appropriate rules and regulations.	ASSESSORS SCORE and COMMENTS		



Behaviours	Maximum points per section	Minimum points required to achieve a Pass	Minimum points required to achieve Distinction
Be energy aware and deliver appropriate advice to customers on energy efficiency.	4	3	4
		To achieve a Pass the apprentice must have evidence of satisfactory completion of units “Using and Communicating Technical Information in the Energy and Utilities Sector.” Evidence must be provided which demonstrates the apprentice’s knowledge of energy efficiency.	To achieve Distinction the apprentice must have evidence of satisfactory completion of the units listed under the Pass criteria and evidence shows they can effectively communicate their knowledge in the work place.
	ASSESSORS SCORE and COMMENTS		

Behaviours	Maximum points per section	Minimum points required to achieve a Pass	Minimum points required to achieve Distinction
<p>Work effectively with people from different trades / disciplines, backgrounds and expertise to accomplish an activity safely, on time, providing confident challenge whilst meeting customer requirements.</p>	4	3	4
		<p>To achieve a Pass the apprentice must have evidence to demonstrate their ability to work effectively and efficiently with other groups. They will act safely and challenge any unsafe or discriminatory acts, at all-time meeting customer expectations. This being observed either as part of an assessment unit or through other workplace observation or witness testimony.</p>	<p>To achieve Distinction the apprentice must have evidence to demonstrate their ability to work effectively and efficiently with other groups. They will act and promote safe working and challenge any unsafe or discriminatory acts, at all-time meeting customer expectations. This being observed either as part of an assessment unit or through other workplace observation or witness testimony.</p>
	<p>ASSESSORS SCORE and COMMENTS</p>		

Behaviours	Maximum points per section	Minimum points required to achieve a Pass	Minimum points required to achieve Distinction
Deliver a polite, courteous professional service to all customers and members of the public whilst safeguarding customer welfare and recognising vulnerability.	4	3	3
		To achieve a Pass the apprentice must have evidence to demonstrate their ability to deliver a polite, courteous professional service to all customers and members of the public whilst safeguarding customer welfare and recognising vulnerability.	As Pass criteria.
	ASSESSORS SCORE and COMMENTS		

Behaviours	Maximum points per section	Minimum points required to achieve a Pass	Minimum points required to achieve Distinction
Maintain and develop personal learning plans to continually develop knowledge and competence.	3	3	3
		To achieve a Pass the apprentice must have evidence to demonstrate the maintenance and development of personal learning plans to continually develop knowledge and competence. This may have been recorded as part of their assessment units.	As Pass criteria.
	ASSESSORS SCORE and COMMENTS		
<b>Totals</b>	<b>TOTAL POINTS (Max 100)</b>	Minimum points required to achieve a Pass = 65 Minimum points required to achieve Distinction = 85	
Total score and Preliminary grade			