

Guide to marking the T Level Occupational Specialism Assessment

Electrotechnical Engineering (8710-33) (353)

T-LEVELS

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Thank you for accessing these support materials.

Please note that the Practical Observation form has been updated since the publication of these materials. The Practical Observation form included in the live assessment materials is the version that must be used when assessing the Occupational Specialism.

Aims and objectives



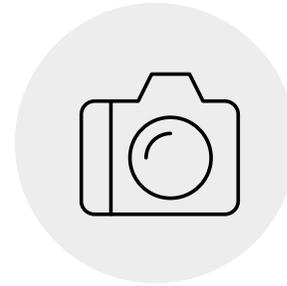
To gain a general overview of the requirements of the Electrotechnical Engineering T Level Occupational Specialism assessment requirements



To become familiar with the assessment documentation



To be able to apply the marking process using the marking grid



To become familiar with typical evidence types

Agenda

- 1** Overview of typical assessment for Occupational Specialism
- 2** Overview of Assessment Themes
- 3** Using the Assessor Pack
- 4** Using the Marking Grid
- 5** How to complete a Practical Observation form

- 6** How to complete the Candidate Record Form
- 7** Making a marking decision
- 8** Declaration of Authenticity

Introduction

- The occupational specialism practical assessments for the T Levels are externally-set summative assessments which are internally marked by centre assessors.
- During this session we will give an overview of how the marking should be approached using the marking grid.
- If there is more than one assessor carrying out marking at the centre, this process should be carried out as part of a group activity to ensure assessors are clear and in agreement about what sorts of evidence are relevant for assessment and which assessment theme they fit into.

We have created a guide to marking process video which is available to watch online [here](#).



Assessment

The assessment for this component consists of a practical assignment that includes a project brief and then a number of tasks for the candidate to complete.

The tasks set produce assessment themes that cover a range of knowledge and skills from the performance outcomes in the qualification specification.

Each candidate will receive a total mark for each assessment theme. The total for each assessment theme is accumulated, giving a total.



Assessment overview

Candidates will be assessed against the following assessment themes:

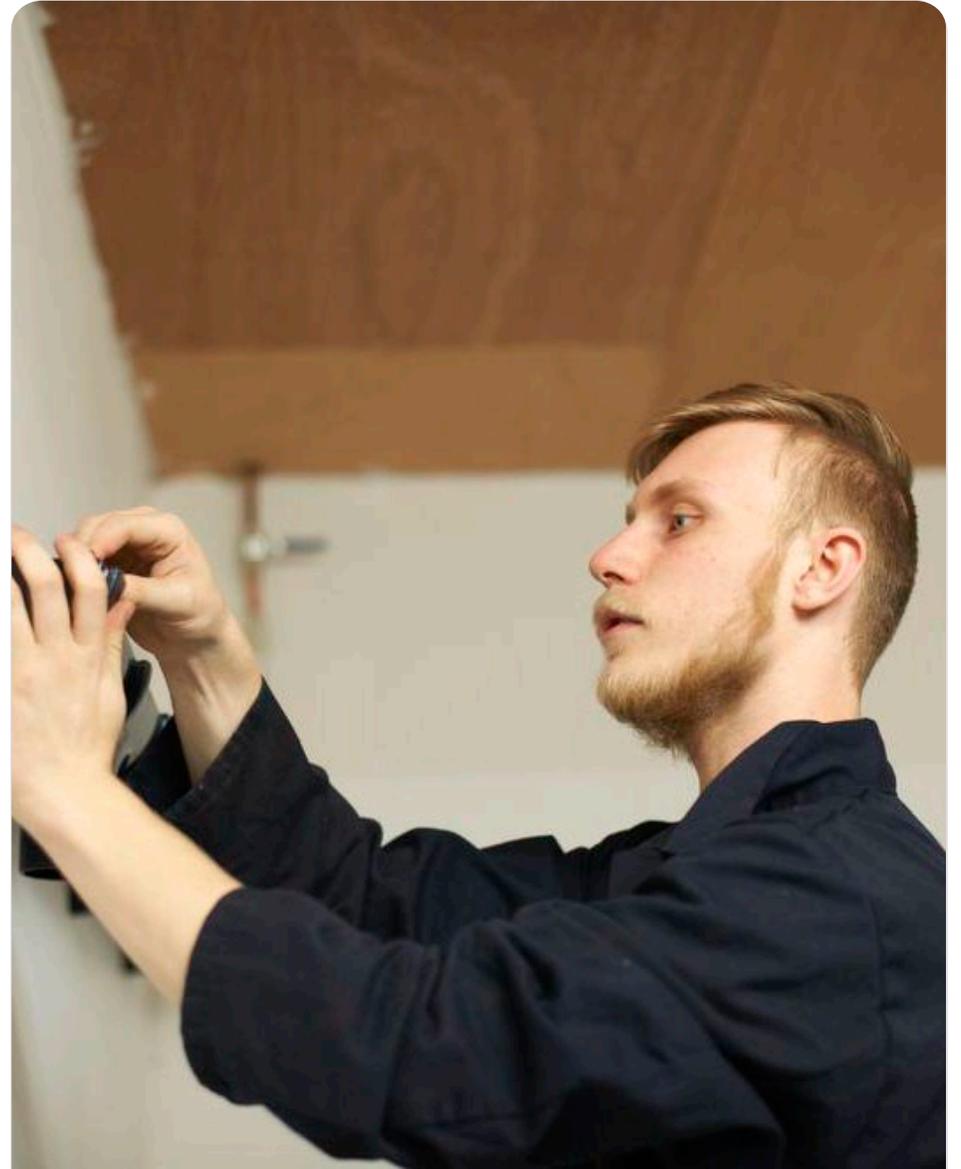
- Health and Safety
- Design and planning
- Systems and components
- Inspect and test systems and components
- Report and information
- Handover and communication
- Working with faults



Assessment pack key information

Assessors must read the Assessor Pack to ensure familiarity and compliance with:

- Time allocation
- Resources
- Conditions of assessment
- What must be produced for marking
- Additional evidence of candidate performance that must be captured



Assessment information

The Practical Assignment is based around a work-based scenario and is made up of 3 Tasks



Task 1

Planning the installation



Task 2

Installation, commissioning and decommissioning



Task 3

Carrying out maintenance

Assessment information

Tasks contain:

- Resources needed
- Tasks to be completed by the candidate
- Conditions of assessment
- What must be produced for marking
- Additional evidence of candidate performance that must be captured

Task 1 – Planning the installation

Resources

- Figures 1 to 5
 - BS 7671
 - IET On-site Guide
 - Manufacturer's literature for selection of luminaires. This may involve access to the internet.
- a) Complete the assessment of general characteristics form as Figure 3 whilst referencing Part 3 of BS 7671. Indicate what must be assessed in relation to the installation shown in Figure 1 and how the assessment impact on the design of the installation.
- b) Complete the lighting design schedule as Figure 4 and select suitable luminaires for the areas shown on the drawing.
- c) Complete the material take off sheet as Figure 5 based on the installation | drawing in Figure 1.
- d) Complete the design grid as Figure 2. Any assumptions made in order to complete the design must be listed on a separate sheet with justifications.

Conditions of assessment:

- The time allocated for this task is 6 hours
- Candidates must carry out the task on their own, under controlled conditions

What must be produced for marking that marks will be awarded for:

- Completed design grid (Figure 2)
- Completed assessment of general characteristics form (Figure 3)
- Completed lighting design form (Figure 4)
- Completed materials take-off sheet (Figure 5)

Additional evidence of candidate performance that must be captured for marking that will get marks awarded for:

- Tutor's notes of the candidates referencing and research approach, describing the methods used to reference or research information and how information was used or processed in relation to the task

Evidence to be collected



Candidate produced evidence

Design calculations, inspection and testing documentation, fault reports.



Practical Observation (PO) Forms

Descriptive and differentiating



Photographic evidence

As specified in the Assessor Guidance



Video evidence

As specified in the Assessor Guidance

Evidence to be collected

Practical Observation (PO) Forms

PO Forms should be descriptive and describe how the candidate approached the tasks and clearly describe performance.

Generalisations and confirmation of tasks completed should be avoided and must be based on the candidate's performance.

Strengths and weaknesses should be recorded giving examples of the observed performance.

Task	What went well?	What could be improved?
Interpreting symptoms and preparation <ul style="list-style-type: none"> clear decisions based on symptoms symptoms fully understood selection of correct equipment safe procedures followed risks assessed secure isolation performed 	After prompting Ian became aware of the need for the self-isolation procedure and where it fitted into the fault-finding process and could verbally explain the stages involved to ensure a circuit is safe to work on. Ian had no difficulty to identify the correct circuits and was very confident around the consumer unit and its circuits. Ian correctly identified the test instruments to be used in the fault diagnosis of each circuit, demonstrating sound knowledge and understanding.	Secure isolation was not carried out because of an oversight by the tutor, which will be rectified going forward.
Fault diagnosis <ul style="list-style-type: none"> use of instruments and connections correct methods applied clear judgements made based on data logical sequence followed 	Ian used the correct test methods and demonstrated a confidence and competency with the test instruments nulling the test leads and selecting the appropriate settings. Ian followed the logical sequence to identify the faults and showed sound judgement when interpreting the readings from the tests to make the correct diagnosis.	Ian struggled to find the fault for OA10 and got a little frustrated because he did not fully understand what was required. It is quite a tricky fault and can be a little misleading in how it is presented, nevertheless with some more experience such a challenge would be more readily understood by Ian.
Rectification <ul style="list-style-type: none"> Consideration of factors Suitable plan of action Equipment identified correctly 	Ian confidently explained factors involved in the rectification process and when questioned on how was located on a circuit. He explained well what n to rectify the circuits necessary before reener	Ian was a little nervous at times and he just



Task	What went well?	What could be improved?
Interpreting symptoms and preparation <ul style="list-style-type: none"> clear decisions based on symptoms symptoms fully understood selection of correct equipment safe procedures followed risks assessed secure isolation performed 	Safe isolation = safe working Symptoms fully understood	
Fault diagnosis <ul style="list-style-type: none"> use of instruments and connections correct methods applied clear judgements made based on data logical sequence followed 	use of instruments + connections correct methods logical sequence followed	
Rectification <ul style="list-style-type: none"> Consideration of factors Suitable plan of action Equipment identified correctly Information provided accurately and technically sound 		

Evidence to be collected

Photo and video evidence

What must be produced for marking that marks will be awarded for:

- Photographs of the installation process to include:
 - A photograph of the whole installation area every 2 hours which will show how the installation progressed over the time period, detail of the standard of workmanship and state of the general work area.
 - On completion of the work if the time taken extended beyond the allowed time.
 - A close-up photo of the connected distribution board
 - Notes: Photographs should not feature the candidate and should focus on the produced work. Each photo of the work area should contain a notice indicating the candidate's name and the time each photo was take, e.g., 2 hours, 4 hours.
- Completed Electrical Installation Certificate, together with a Schedule of Inspections, and a Schedule of Test Results, accompanied by a copy of the Guidance for recipients.



Evidence to be collected

Photographic

Follow the guidance given in the Assessor Pack and ensure photographic evidence is clear at a good resolution and in line with the guidance.

Video

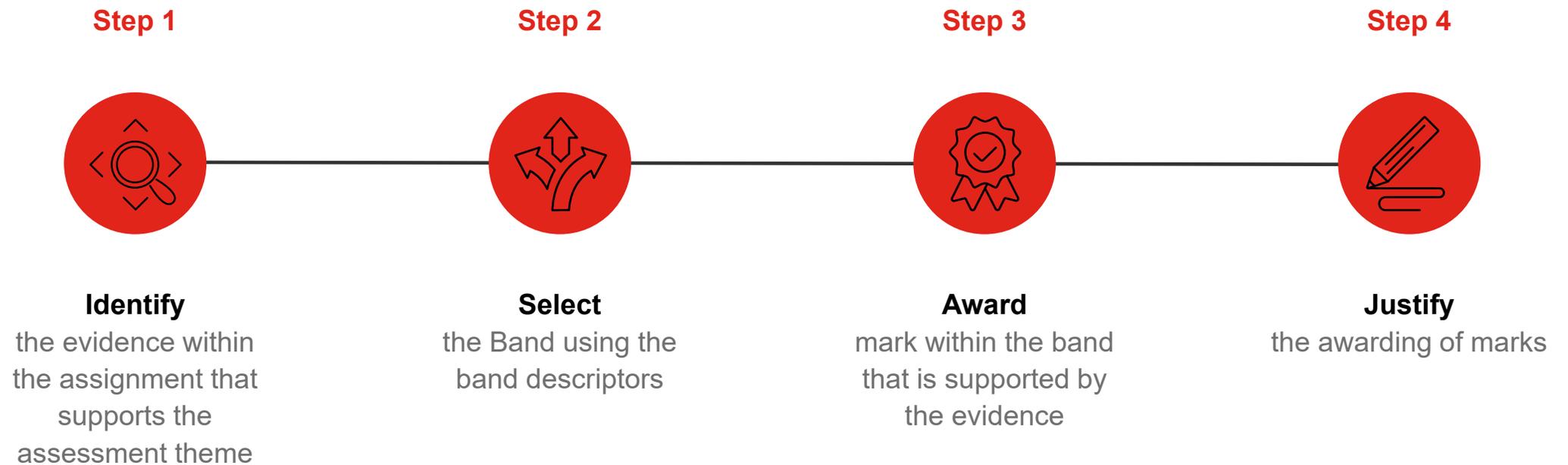
Video evidence may be required to capture some aspects of the practical activities. Assessors must refer to the assessor pack guidance. Videos should be no longer than stipulated.





How to mark the evidence

Marking of each Assessment Theme



Assessment theme – Health and Safety



Task 1
Risk Assessment



Task 2
Assessor observation

- Installation work
- Inspection, testing and commissioning
- Decommissioning



Task 3
Assessor observation

- Inspection and testing
- Performance of diagnostic techniques

Additional supporting evidence

Photographic and/or video evidence requirements are stated in the specific task guidance for each task within the assessor pack



Assessment theme – Health and safety

Task	Notes
Installation	<p data-bbox="504 282 2270 404">Detailed, accurate and differentiating notes which identify areas of strength and weakness are necessary to distinguish between different qualities of performance and to facilitate accurate allocation of marks once all evidence has been submitted.</p> <ul data-bbox="504 504 2339 1015" style="list-style-type: none"><li data-bbox="504 504 2339 629">• The candidate prepared the workspace with consideration the majority of health and safety requirements and showed some good housekeeping, correct PPE was selected for use such as hard hat, boots, safety goggles and High Viz waistcoat.<li data-bbox="504 646 2339 818">• The candidate used their equipment and materials list during collection to ensure they had all the materials they needed. However, this was lacking in some details in terms of quantities, and this caused some delays as the candidate had to ask the store person for the extra materials required. All tools were used in an effective safe manner. The installation was safely isolated and lock off prior to the installation commencing.<li data-bbox="504 835 2339 915">• The workplace was reasonably maintained in terms of tidiness of tools, materials and equipment throughout the task, but the work area did become cluttered at time during the installation.<li data-bbox="504 932 2339 1015">• Candidate did not make any reference to pre-existing marks or damage to the wall prior to marking out for their installation, tape measure and...

Assessment theme – Health and safety

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Assessment theme – Health and safety

Band 1 descriptor	Band 2 descriptor	Band 3 descriptor
1-4	5-8	9-12
<p>Risk mitigation methods limited. Likelihood against probability attempted but lacks reasoning.</p> <p>Health and safety is followed during preparation and throughout tasks so that all work is completed safely. When working some potential hazards were missed and on occasion minimal guidance is required to mitigate against minor risks.</p>	<p>Risk mitigation methods identified for some of the potential risks, but not all. Consideration given to potential for harm and probability factors.</p> <p>Health and safety is followed during preparation and throughout tasks and all work completed safely.</p>	<p>Risk mitigation methods are detailed and have been clearly identified for all potential risks.</p> <p>Potential for harm and probability factors have been identified throughout.</p> <p>Health and safety is followed during preparation and throughout tasks and all work completed safely. Risks and hazards that occur during the tasks are correctly mitigated against as they arise.</p>

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Mark and Band Justification

Band 2 descriptor
5-8
<p>Risk mitigation methods identified for some of the potential risks, but not all. Consideration given to potential for harm and probability factors.</p> <p>Health and safety is followed during preparation and throughout tasks and all work completed safely.</p>

	Band 1				Band 2				Band 3			
	1	2	3	4	5	6	7	8	9	10	11	12
Band	<p>Band justification</p> <p>Across the evidence generated for each task, such as performance observation forms, the evidence suggest that the majority of the work was undertaken in a very safe manner with many risk mitigation methods identified and applied throughout the tasks meaning band 1 has been exceeded. None of the evidence suggests that risk probability was explored or demonstrated, and the candidate did not apply dynamic risk assessing once the initial risk management techniques were applied. This therefore does not match band 3 so band 2 applies.</p>											
Mark	<p>Mark justification</p> <p>The safe isolation process was correct on each occasion; however, the candidate was a little hesitant on the first occasion. PPE was effectively used throughout, but probability not fully considered and good housekeeping was not maintained at all times during the practical installation, a mid-range mark is selected – 6 marks.</p>											

Declarations of Authenticity

Declarations of Authenticity are required and must be signed by the candidate and tutor

Declaration of authenticity

Assessment ID	Qualification number
Candidate name	Candidate number
Centre name	Centre number

Additional Support

Has the candidate received any additional support in the production of this work?

No **Yes** (Please tick appropriate)

If yes, give details below (and on a separate sheet if necessary).

--

Candidate:

I confirm that all work submitted is my own, and that I have acknowledged all sources I have used.

Candidate signature	Date

Tutor:

I confirm that all work was conducted under conditions designed to assure the authenticity of the candidate's work, and am satisfied that, to the best of my knowledge, the work produced is solely that of the candidate.

Tutor signature	Date

Note: Where the candidate and/or tutor is unable to or does not confirm authenticity through signing this declaration form, the work will be returned to the centre and this will delay the moderation process. If any question of authenticity arises, the tutor may be contacted for justification of authentication

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