T Level Technical Qualification in Engineering, Manufacturing, Processing and Control

8730-13 Core Report (Autumn 2024)

Version 1.0

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Foreword

Autumn 2024 Results

The Technical Qualification is made up of two components (the Core and the Occupational Specialism), both of which need to be successfully achieved to attain the T Level Technical Qualification in Engineering and Manufacturing. This takes into account the best result for a specific component from the summer and autumn series. This document covers the Core component only.

We discussed the approach to standard setting/maintaining with Ofqual and the other awarding organisations before awarding this year. We have agreed to take account of the newness of qualifications in how we award this year to recognise that students and teachers are less familiar with the assessments, whilst also recognising the standards required for these qualifications.

Introduction

This document has been prepared to be used as a feedback tool for Providers in order to support and enhance teaching and preparation for assessment. It is advised that this document is referred to when planning delivery and when preparing candidates for the T Level Technical Qualification (TQ) in Engineering, Manufacturing, Processing and Control **Core** assessments.

This report provides general commentary on candidate performance in both the examination papers and Employer-Set Project (ESP). It highlights common themes in relation to the technical aspects explored within the assessment, giving areas of strengths and weakness demonstrated by the cohort of candidates who sat assessments in the Autumn 2024 assessment series.

The grade boundaries (and notional boundaries where appropriate) that were used to determine candidates' final Autumn 2024 results are also provided.

More information regarding T Levels TQ grading, awarding, UMS and rules for retakes can be found in the T Levels Technical Qualifications Grading Guide available on the City & Guilds T Levels Resources and Support Hub.

8730-031 Paper 1

This exam paper covers the following elements of the Engineering & Manufacturing core content:

- Essential mathematics for engineering and manufacturing
- Essential science for engineering and manufacturing
- Materials and their properties
- Mechanical principles
- Electrical and electronic principles
- Mechatronics

This exam paper allowed for candidates to demonstrate a broad range of subject knowledge within the Engineering and Manufacturing core element.

The exam is split into **two** sections. Below details the types of questions and marks available for each section.

Section A is made up of **67** marks and includes **19** short answer questions.
Section B is made up of **33** marks and includes **3** extended response questions.

The exam is designed to provide sufficient sampling across the content and consists of a mixture of short answer questions (SAQs), some of which are structured, and extended response questions (ERQs). The exam assesses across assessment objectives (AOs) to allow for the appropriate assessment and differentiation of candidates to support the reliable setting of boundaries. The assessment objectives represent the following:

- **AO1 a** Demonstrate knowledge
- **AO1 b** Demonstrate understanding
- **AO2** Apply knowledge and understanding to different situations and context
- **AO3** Analyse and evaluate information and issues

This was the fourth series of this examination being sat. The paper is common to the three pathways of Engineering & Manufacturing; Design & Development (D&D), Maintenance, Installation and Repair (MIR) and Engineering, Manufacturing, Processing and Control (EMPC).

The examination paper is designed so that it gradually increases in challenge. Questions were ramped in terms of difficulty throughout section A starting with AO1a through to AO2, which allowed for the level of demand to be increased steadily throughout the paper. The extended response questions (ERQ) in section B were scenario based and ramped with AO2 and AO3 questions.

Areas of strength include:

- recalling the function of a thermistor (Q2). The majority of candidates demonstrated good recall of knowledge and scored full marks.
- identifying and recalling the function of a micrometer (Q3a). This saw a spread of marks with the majority of candidates scoring 1 or 2 marks out of 3 marks.
- recalling the definition of kinetic energy (Q5a). The majority of candidates demonstrated good recall of knowledge and scored full marks.

- explaining the purpose of microcontrollers and providing examples of where they are used (Q9). This saw a spread of marks across the mark range (up to 4 marks).
- determining the temperature of the drill after it is in use for a certain amount of time (Q17a), as well as calculating the maximum length of time the drill can be used for before it reaches a certain temperature (Q17b). This assessed candidates understanding of determining numbers in a sequence and saw the majority of candidates achieving full marks in this question.
- analysing data and calculating probabilities in an engineering context (Q18). Candidates performed well on part a) and b) of this question, with the majority of candidates achieving full marks, and on part c) almost half of the cohort achieved full marks.
- explaining the advantages of using tensile testing in relation to a scenario provided (Q19). This was an unconstrained question at the end of section A, and demonstrated a spread of marks, with candidates accessing all marks available (maximum of 6 marks).

Overall, candidates tended to perform better on questions requiring a written response rather than solutions requiring mathematical methods.

Areas of weakness include:

- recalling the measurement principles of uncertainty (Q3bii) and resolution (Q3biii). Candidates struggled with this recall of knowledge question, with many candidates providing incorrect descriptions.
- recalling what a diode is used for and providing an application (Q4). Here, candidates struggled to correctly recall the purpose of a diode.
- converting a hexadecimal number to decimal form (Q6). Unfortunately, a frequent point of confusion was interpreting "A" as 10. Few candidates arrived at the correct answer. Common errors included incorrect application of powers of 16.
- explaining the differences between magnetic field strength and magnetic flux density (Q8). This proved to be a challenging question, with only a few candidates earning full marks. Many had difficulty distinguishing between magnetic field strength and magnetic flux density or failed to provide adequate explanations.
- calculating the common velocity utilising the information provided within the scenario (Q10). The question was based on the principle of conservation of momentum. Some candidates understood the concept of the question but struggled with the fact that, in this case, one of the velocities was negative.
- understanding of cartesian coordinates and polar coordinates and the conversion of these (Q11). More than half the cohort achieved no marks with this question (Q11a, 11b). Candidates seemed to perform slightly better when converting polar coordinates to cartesian.
- demonstrating knowledge and understanding of differentiation (Q16) which required candidates to calculate the maximum area of a rectangle. Unfortunately, most candidates struggled to correctly use differentiation to answer the question.

The understanding of mathematics and scientific principles was noticeably poor, and candidates' overall responses were not as expected for Level 3. This was also noticed in the summer series. With some written responses candidate's responses often lacked the detail to demonstrate they had the knowledge required to achieve the available marks. Responses

were often generic and sometimes misunderstood. For example, in Q19, some candidates understood this question as the use of tensile tests for the design/testing of components of final products rather than testing the material prior to manufacturing. Similarly, in Q8, flux density and field strength definitions were interchanged or incorrect.

Responses to extended response questions (ERQs)

The majority of candidates attempted the ERQ's within Section B, with the high achieving candidates responding with more depth and detail in their responses, in comparison to the low achieving candidates. The ERQs saw most of the cohort placed in bands 1 and 2; however, they did show a spread of marks across the bands for all three questions. These questions had a higher discrimination value across the paper. In many responses, the candidates struggled to display their evaluation skills, with limited justifications or rationales for their choices.

It is noted that candidates' performance was weaker in Q20; it was observed that there was a general lack of understanding regarding electrolysis, with many candidates mistakenly linking it to galvanising or galvanic protection without grasping the process or its execution. Electroplating was often confused with painting, showing limited knowledge of surface finishing techniques. Most candidates scored in Band 1, with few reaching Band 2 or 3, highlighting a weak grasp of electrolysis in corrosion reduction. Recommendations for automotive parts were poorly addressed, and many candidates failed to apply electrolysis principles effectively in context.

Q21 assessed candidates' knowledge and understanding of material choice within the context of a drone body. The majority of responses were in mark band 2 (4-6 marks). Candidates mentioned a variety of materials, including some that were not relevant and/or a poor decision to use. Some candidates only discussed properties from the question stem; 'flight, resit impact and weather conditions'. Candidates that scored within the lower bands, lacked justification for their selection of material. A full range of marks was seen.

Q22 assessed candidates' knowledge and understanding of different power sources available in relation to the context of the question. The majority of responses were at the top of mark band 2 (5-6 marks) and the bottom of band 3 (7 marks). Candidates were able to demonstrate analysis of the different types of power sources and show evaluative skills with some reasoning as to which power source would be most suitable. Candidates that scored within the lower band, often did not relate their choices back to the context of the question and provided descriptive responses.

8730-032 Paper 2

This exam paper covers the following elements of the Engineering and Manufacturing core content:

- Working in the Engineering and Manufacturing sectors
- Engineering and manufacturing past, present, and future
- Engineering representations
- Engineering and manufacturing control systems
- Quality management
- Health and Safety principles and coverage
- Business, commercial, and financial awareness
- Professional responsibilities, attitudes, and behaviours
- Stock and asset management
- Continuous improvement
- Project and programme management

This exam paper allowed for candidates to demonstrate a broad range of subject knowledge within the Engineering and Manufacturing core element.

The exam is split into **two** sections. Below details the types of questions and marks available for each section.

Section A is made up of **67** marks and includes **13** short answer and medium answer questions.
Section B is made up of **33** marks and includes **3** extended response questions.

The exam is designed to provide sufficient sampling across the content and consists of a mixture of short answer questions (SAQs), some of which are structured, and extended response questions (ERQs). The exam assesses across assessment objectives (AOs) to allow for the appropriate assessment and differentiation of candidates to support the reliable setting of boundaries. The assessment objectives represent the following:

- **AO1 a** Demonstrate knowledge
- **AO1 b** Demonstrate understanding
- **AO2** Apply knowledge and understanding to different situations and context
- **AO3** Analyse and evaluate information and issues

This was the fourth series of this examination being sat. The paper is common to the three pathways of Engineering and Manufacturing; Design & Development (D&D), Maintenance, Installation and Repair (MIR) and Engineering, Manufacturing, Processing and Control (EMPC).

Questions were ramped in terms of difficulty throughout section A starting with AO1a through to AO2, this allowed for the level of demand to be increased steadily throughout the paper. The extended response questions ERQ in section B were scenario based and ramped with AO2 and AO3 questions.

Areas of strength include:

- defining the term ‘continuous professional development (Q1). Candidates performed well with this recall of knowledge question and saw a spread of marks for this question.
- understanding of the health and safety responsibilities of employees in an engineering workplace (Q2). Candidates performed well with this question, with the majority of candidates gaining full marks for this question.
- explaining the applications of CAD software in engineering (Q6). There was a spread of marks with the majority of candidates scoring 2 marks or more.
- understanding of how health and safety legislation affects the frequency of accidents (Q7). This was answered well by the majority of candidates.
- explaining the behaviours the engineer should display during a presentation (Q11c). The candidates’ responses provided a good spread of marks (up to a maximum of 4 marks).
- understanding of how a change to batch manufacturing would affect a company (Q11d). The majority of candidates were able to gain partial marks with this question achieving 2 marks out of 4. Some candidates did not expand upon their answers to gain full marks.

Areas of weakness include:

- recalling the term ‘comparator’ as used in control systems (Q3). Candidates struggled with this recall question, with two-thirds of the cohort scoring 0 marks.
- understanding of the advantages of manufacturing resource planning (Q8b). Half the candidates scored 0 marks. Manufacturing Resources Planning was misunderstood as some candidates focused on Materials Resources Planning.
- explain how cyber-physical systems could influence manufacturing (Q9). Unfortunately, candidates did not perform well, with some candidates struggling to secure one mark with lack of understanding and knowledge.
- explaining why commissioning activities are undertaken by engineers with specialist skills in maintenance (Q10). More than half the candidates got 0 marks as they were not able to articulate commissioning activities correctly.
- understanding environmental legislation that are relevant to a company’s activities (Q11a). Attempts were made by candidates to answer this question but candidates struggled to demonstrate application of knowledge and often incorrect legislation was evidenced.
- suggesting a type of input sensor on a control system that will measure the height of boxes moving along a conveyor belt (Q12a). More than half of the candidates got 0 marks. Many candidates did attempt this question, but examples of incorrect sensor-type were evidenced.
- explaining how the sensor identified in Q12a) would function (Q12b). Almost half of the cohort scored 0 marks. Most candidates did attempt this question, but many examples of incorrect sensor operation and function were evidenced for the scenario.
- explaining how actuators could be used in the scenario provided (Q12c). Less than half of the cohort scored 0 marks. Most candidates did attempt this question, but many examples of incorrect actuator operation were evidenced. Some candidates were able to describe an actuator but not how it functioned.

Within AO2 questions candidates frequently showed evidence of basic knowledge, but often did not expand their answers enough to show the context specific understanding required to access the higher marks.

Responses to extended response questions (ERQs)

The ERQ's in this paper, provided a mixture of responses from candidates. For the last two ERQ's, most candidates scored within mark band 2, however it is noted that ERQ 1 did not perform as well.

Q14 assessed candidates' knowledge and understanding of the roles and responsibilities of engineering bodies with regards to quality management in the manufacturing sector. Unfortunately, a notable proportion of candidates demonstrated a lack of understanding the role of engineering bodies, often focusing on product quality issues, rather than quality management.

Q15 required candidates to evaluate the benefits and limitations to the company of implementing a programme of SMED activities within their manufacturing operations. This question was answered well by some candidates, although a notable proportion of candidates only achieved marks within mark band 1 and 2. Some candidates provided generalised answers and did not link back to the context.

Q16 required candidates to discuss how the 6Rs of sustainability could influence the design and manufacture of plastic casing products. This synoptic extended response question was generally well answered by candidates, with a high proportion of candidates accessing marks in the middle mark bands. Some candidates gave generic responses that did not link back to the context; a small proportion gave responses that showed incomplete knowledge of the 6Rs.

8730 Sub-Component: Exam

Best practice and guidance to providers on potential areas for improving performance in assessment

It is recommended that providers utilise and deliver the sample examinations and past papers as formative assessment to support candidates in preparation for summative assessment.

Providers are advised to ensure that the full range of specification handbook content is covered to the required depth shown in the 'what learners need to learn' section of the content, and that sufficient time is given to each of these topic areas.

Candidates would benefit from understanding what different command words ask of them. Understanding distinctions, such as between 'Explain' and 'Describe,' helps tailor responses effectively. Encouraging careful reading of questions prevents misinterpretation and improves accuracy. Structured guidance and practice enhance candidates' ability to respond appropriately. For example, the type of response required by an 'Explain' question requires a higher level of response than a 'Describe' question. Candidates should be reminded to read and understand all questions fully before responding to avoid losing marks due to misinterpretation/understanding.

Candidates' performance in understanding mathematics and scientific principles was noticeably poor, and candidates' overall responses in this area were below expectations for Level 3. Providers may consider regular practice, real-world applications, and structured resources to enhance understanding.

Providers should support candidates in developing their skills in writing responses to questions that ask for demonstration of understanding, application of knowledge, analysis and evaluation. Providers could foster evaluation skills by prompting critical thinking and justification of arguments. Model answers, peer reviews, and targeted feedback could be used to refine candidate responses during formative activities.

Performance in ERQs could be improved by encouraging deeper explanations and thorough analysis of different scenarios and relating it back to the context. To achieve high scores, candidates typically require a more comprehensive exploration of scenarios within their context. Candidates should also provide well-supported conclusions and justified arguments.

Some of the papers had very unclear handwriting, making it difficult for the marker to read the response. Providers should encourage candidates to ensure their handwriting is legible. Writing in block capital letters is a possible solution if a candidate's handwriting is not legible.

A reminder to providers that if candidates choose to resit one or more exam papers, both papers must always be resat within the same assessment series. The best combined result from the exams sat in the same assessment series will be used to form the Core Examination subcomponent of the Core grade.

Support materials

Sample and Past Papers:
It is recommended that Providers utilise and deliver the **sample examinations** as well as **past papers** as formative assessment to support candidates in preparation for summative assessment.

Sample and past papers: T Level Technical Qualification in Engineering and Manufacturing (Core) qualifications and training courses | City & Guilds (cityandguilds.com)

Exam Guides:
It is also recommended that Providers utilise the **exam guides** which provides general tips for candidates taking these assessments, examples of different types of questions that will appear, example candidate responses with examiner commentary and examiner hints and tips.

Link: Exam Guide

Events and Webinars:
City & Guilds run free webinars and events throughout the year on preparing for and delivering the T Level exams. The below link provides details on upcoming in person events, live webinars, on-demand webinars and preparation for the core exams.

Link: Events and webinars - T Levels | City & Guilds (cityandguilds.com)

Grade boundaries

The table below shows the grade mark ranges for the Exam, along with the notional boundaries for Paper 1 and Paper 2 – **for the Autumn 2024 series.**

Grade	Mark range	Notional boundaries	
		Paper 1 (8730-031)	Paper 2 (8730-032)
A*	159-200	79-100	79-100
A	139-158	69-78	70-78
B	119-138	59-68	59-69
C	99-118	49-58	49-58
D	79-98	40-48	39-48
E	60-78	31-39	29-38
Unclassified (U)	0-59	0-30	0-28

8730-034 Sub-Component: Employer-Set Project

The Employer-Set Project (ESP) assessment is a project comprised of a number of tasks, based on a scenario comparable to a real-life project in the industry. The assessment is designed to allow candidates to show how they can perform on a project using the core knowledge and skills. This approach to assessment emphasises to candidates the importance and applicability of the full range of their learning to industry practice.

The project is made up of a number of tasks which all relate to the same employer-set project brief:

- Task 1: Research
- Task 2: Report
- Task 3: Design
- Task 4: Present

The project draws on the content from the core knowledge that sits across all specialisms in Engineering, Manufacturing, Processing and Control.

The ESP assesses across assessment objectives that will allow for the appropriate differentiation of candidates to support the reliable setting of boundaries. The assessment objectives represent the following:

- **AO1** Plan approach to meet the brief
- **AO2** Apply knowledge and skills to contexts
- **AO3** Select techniques and resources to meet brief
- **AO4** Use maths, English and digital skills
- **AO5** Release project outcome and evaluate

This was the fourth series of the Employer-Set Project. The project is based around a brief which provides information on an Engineering, Manufacturing, Processing and Control project and specific relevant details and resources. Candidates must draw on their Core knowledge and skills and independently select the correct processes and approaches to take to provide a solution and the evidence specified in the project brief. All tasks are completed under supervised/controlled conditions.

Employer-Set Project tasks overview

Task	Task Type	Assessment Objectives covered	Max Mark	Task weighting
1	Research	AO1, AO2a, AO3 (Planning, core knowledge, selecting techniques and resources)	9	16.6%
		AO2b (Core skills)	6	
2	Report	AO1, AO3 (Planned approach, selecting techniques)	6	20%
		AO2a (Core knowledge)	6	
		AO2b (Core skills)	6	
3	Design	AO1, AO3 (Planned approach, selecting techniques)	6	26.7%
		AO2a (Core knowledge)		
		AO2b (Core skills)	6	
		AO5a, AO5b (Realise outcome, review outcome)	6	
4	Present	AO1, AO3 (Planned approach, selecting techniques)	6	26.7%
		AO2a (Core knowledge)	6	
		AO2b (Core skills)	6	
		AO5a, AO5b (Realise outcome, review outcome)	6	
Maths, English and digital skills		AO4a (Maths)	3	10%
		AO4b (English)	3	
		AO4c (Digital skills)	3	

Task 1 – Research:

Candidates were required to research potential approaches for transporting crushed and graded granite to the loading/distribution area by conveyor. The majority of candidates scored within band 2 descriptor for this research task.

Candidates generally produced research that showed evidence of planning and some consistency. This sometimes however lacked balance and was not always as methodical as seen in previous series. Most candidates showed appropriate core knowledge, but this sometimes-lacked accuracy. Although most candidates listed the research sources used, this was sometimes incomplete. A range of core skills was demonstrated within this research task, however this often-lacked consistency across the whole task. Some candidates used a good range of images and references, but others produced largely text-only based responses that showed a lack of skill in developing responses

Actions providers can take to support assessment preparation for future series:

Providers need to ensure that candidates understand how to break a problem down, to enable candidates to carry out research comprehensively. Providers are also advised to work with candidates to improve their skills in relation to presenting their research findings in a balanced manner. This includes utilising a variety of images, tables and text when presenting their findings, and effectively reference all sources used when completing research.

Task 2 – Report:

Candidates were required to product a report in response to the project brief outlining their approach to designing a conveyor belt system. The majority of candidates scored at the top of band 2 descriptor for this task.

The report task was a stronger aspect to this ESP, with many candidates utilising the internet (as is permitted in the conditions of the assessment) to further research more content in their report. In line with previous series, most candidates produced reports that were planned, organised and at least largely complete. However, there were sometimes gaps, such as the correct density of crushed granite and the angle of repose being missed out. Relevant techniques and conventions were typically used, although not always to industry standards. Core knowledge was generally applied well from across the core content, with correct technical terminology. Justifications were present, but often superficial and lacking depth, for example, when explaining the viability of the solution. The majority of candidates applied a range of core skills within their response to this task, but responses were not always logical and fully coherent.

Actions providers can take to support assessment preparation for future series:

Providers could potentially use previous versions of the ESPs to ensure candidates know how to breakdown the task requirements and how to make sure all aspects of tasks are addressed. In addition, it is encouraged that candidates have opportunities to develop their report writing skills, including producing reports to industry standards. Providers are also advised to ensure candidates are taught how to justify responses against the brief and task requirements.

Task 3 – Design:

Candidates were required to produce an annotated design of a conveyor system. This was either produced using a CAD package or by hand as a paper-based drawing. Alongside this, candidates were required to submit design calculations related to the assembly drawing. and reflective notes. A full spread of marks was seen, and the majority of candidates achieved marks within the band 2 descriptor.

Candidates generally produced responses that were largely complete, but not always as well planned or organised at they could have been. Knowledge was typically well applied from across the core, but with some gaps and/or technical inaccuracies. The majority of candidates provided drawings or sketches of the conveyor system. Some responses used a range of industry standard conventions, but others missed aspects such as a drawing frame or completed title block. The use of draft iterations was quite limited overall. Annotations were typically present but sometimes lacked detail and were mainly descriptive, rather than explaining the features of the design. In some instances, calculations or reflective notes were incomplete or missing, which forms a substantial part of this task. Within the reflective notes, some judgement and reasoning were present, but this was often superficial in nature. Most candidates addressed at least most of the task requirements, produced a mostly effective solution and reviewed how well the outcome had been achieved. However, some responses only partially addressed the requirements and produced an evaluation or review that did not clearly address how well the outcome had met the brief.

Actions providers can take to support assessment preparation for future series:

Providers are advised to provide opportunities for the candidates to practice their drawing skills, including how to use standard drawing conventions. This task had the option of hand-drawn or CAD, and it is advised that candidates have opportunities to develop these skills to enable them to address the requirements of the task. Providers are also encouraged to ensure candidates are taught how to effectively justify their design choices, including how to annotate designs in detail, covering the required aspects of the brief.

Task 4 – Present:

Candidates were required to produce and deliver a presentation which addressed the task brief. The majority of candidates performed well within this task, achieving within the band 2 descriptor.

Presentations were generally good, with candidates presenting their solutions to the task well. Most candidates showed at least some evidence of a structured and logical presentation and the selection of appropriate techniques for delivery, such as PowerPoint presentations and supporting notes. However, there were some distraction behaviours noted, and many candidates did not consider the non-technical nature of the audience appropriately. Some candidates read from the board or notes rather than making eye contact with the audience. Most candidates coherently explained how their design would meet the technical requirements of the brief. However, responses often lacked justifications and reasoning in terms of how the solution addressed some of these requirements. Most candidates responded confidently to questions asked by the tutor at the end of the presentation, showing some good technical knowledge. The presentations typically showed good communication skills in terms of the

clarity of size of text and figures used. However, some information communicated was too complex or not appropriate for the audience and their level of understanding. This is a continuing area of weakness across all series so far. Most candidates addressed at least some of the challenges faced and how they were overcome, but often this was completed in a superficial manner. Some candidates identified improvements that could be made to their solution, but few went into depth with this.

Actions providers can take to support assessment preparation for future series:

Providers are advised to ensure candidates are taught how to deliver presentations confidently and directly address the audience in front of them. This includes ensuring candidates know how to pitch presentations appropriately to audiences with technical and non-technical backgrounds.

Maths, English & digital skills:

Evidence across all four tasks is taken into consideration when assessing English, maths and Digital Skills.

In terms of maths skills, most candidates applied a range of mathematical concepts and calculations effectively, but sometimes with errors and hence not always fully and consistently.

In terms of English skills, most candidates used appropriate communication styles for the tasks completed, with mostly accurate spelling and grammar. Technical information was generally communicated fluently, in terms of both written and oral communication. However, this was not always appropriate across all tasks.

Most candidates used at least basic digital options where appropriate in the different tasks. For example, Word for research notes and reports, PowerPoint for presentations and internet search engines for completing research. Some also used CAD effectively to produce their drawings. However, digital software was not always used in line with industry practices, limiting access to band 3.

Actions providers can take to support assessment preparation for future series:

Candidates need to be reminded to show all workings out when performing calculations and to check them for errors. Ensure candidates are taught how to use digital software, such as word processing and presentation software, to industry standards.

Best practice and guidance to providers on potential areas for improving performance in assessment

Providers should complete and submit the ‘Evidence checklist’ and must detail on this where evidence has not been submitted. This is designed to be a checklist of the minimum evidence that is expected for a candidate. This checklist must align back with the evidence uploaded. If there are any discrepancies with this, this may delay the marking of the candidates work and City and Guilds will be back in contact with the provider to clarify this.

Providers are encouraged to minimise the number of separate documents uploaded. E.g. ensure all relevant information for Task 3a (Design) is submitted in the same document with the correct filename. There was an issue with some file conventions for evidence making it difficult for markers to identify evidence. Providers are advised to ensure that candidate documents are uploaded correctly and contain the relevant content and labelled with the correct filename to ensure consistency and ease of access. For example:
Task_1_Research [Registration numbers #]_[surname]_[first letter of first name]

In some instances, providers uploaded evidence for the incorrect candidate. Providers should be aware that this could lead to a delay in results being issued. Providers are asked to check the evidence hasn't corrupted prior to upload and that any videos play and have sufficient sound. This should then be declared on the evidence checklist.

Providers are strongly encouraged to use evidence headers for each task, to allow for ease of identification of candidate evidence and efficiency in marking. All information within the task headers should be completed. Candidate evidence should be included within the header document and not as a separate file.

Providers are reminded that each task is marked in isolation and that each task has been weighted in relation to the assessment objectives covered. This information is detailed in the specification and sample assessments.

Providers are advised to ensure the tutor and candidate both sign and date Declarations of Authenticity once the assessment has been completed. This confirms that the assessment has been conducted in line with the stipulated conditions and guidance. Each candidate only requires one declaration each, declarations are not required for each task. Providers only have to upload the declaration as evidence of compliance to the assessment conditions, there is no need to upload further evidence such as records of the candidates search history. If City and Guilds have concerns relating to the conduct of the assessment and require further evidence, we will contact Providers for this.

Support materials

Sample and Past ESP Assessments:
It is recommended that Providers utilise and deliver the **sample ESP** as well as **past ESPs** as formative assessment to support candidates in preparation for summative assessment.

Sample and past ESPs: T Level Technical Qualification in Engineering and Manufacturing (Core) qualifications and training courses | City & Guilds (cityandguilds.com)

Exemplar ESP Assessments:
It is also recommended that Providers utilise the **exemplar ESP Assessments** to help understand the standard that was required in the Summer 2023 and Summer 2024 assessment series to achieve an A and E grade.

8730-034 ESP A grade exemplar:

- Example 1 (Summer 2024)
- Example 2 (Summer 2023)

8730-034 ESP E grade exemplar:

- Example 1 (Summer 2024)
- Example 2 (Summer 2023)

TQ Employer-Set Project Assessment Process Guide:
The guide gives support to Providers in preparing for and delivering T Level Employer-Set Projects.

Link: TQ Employer-Set Project Assessment process guide (cityandguilds.com)

Events and Webinars:
City & Guilds run free webinars and events throughout the year on preparing for and delivering the T Level Employer Set Projects. The below link provides details on upcoming in person events, live webinars, on-demand webinars and preparation for the ESP assessment.

Link: Events and webinars - T Levels | City & Guilds (cityandguilds.com)

Grade boundaries

The table below shows the grade mark ranges for the Employer-Set Project – **for the Autumn 2024 series.**

Grade	Mark range
A*	71-90
A	63-70
B	55-62
C	47-54
D	39-46
E	31-38
Unclassified (U)	0-30

8730-13 Engineering, Manufacturing, Processing and Control Core

The T Levels Technical Qualification (TQ) in Onsite Construction core is made up of the below sub-components (and weightings).

- Exam (70%)
- Employer-Set Project (30%)

UMS grade boundaries

The table below shows the UMS values available for grades in the sub-components. It also shows the UMS values required to achieve each grade for the overall Core. This table will not vary across the series, the values are fixed for this TQ.

Grade boundary	Exam sub-component	ESP sub-component	Overall Core
A*	252-280	108-120	360-400
A	224-251	96-107	320-359
B	196-223	84-95	280-319
C	168-195	72-83	240-279
D	140-167	60-71	200-239
E	112-139	48-59	160-199
Unclassified (U)	0-111	0-47	0-159

Get in touch

The City & Guilds Quality team are here to answer any queries you may have regarding your T Level Technical Qualification delivery.

Should you require assistance, please contact us using the details below:

Monday - Friday | 08:30 - 17:00 GMT

T: 0300 303 53 52

E: **technicals.quality@cityandguilds.com**

W: **http://www.cityandguilds.com/tlevels**

Web chat available **here**.

The T Level is a qualification approved and managed by the Institute for Apprenticeships and Technical Education.

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