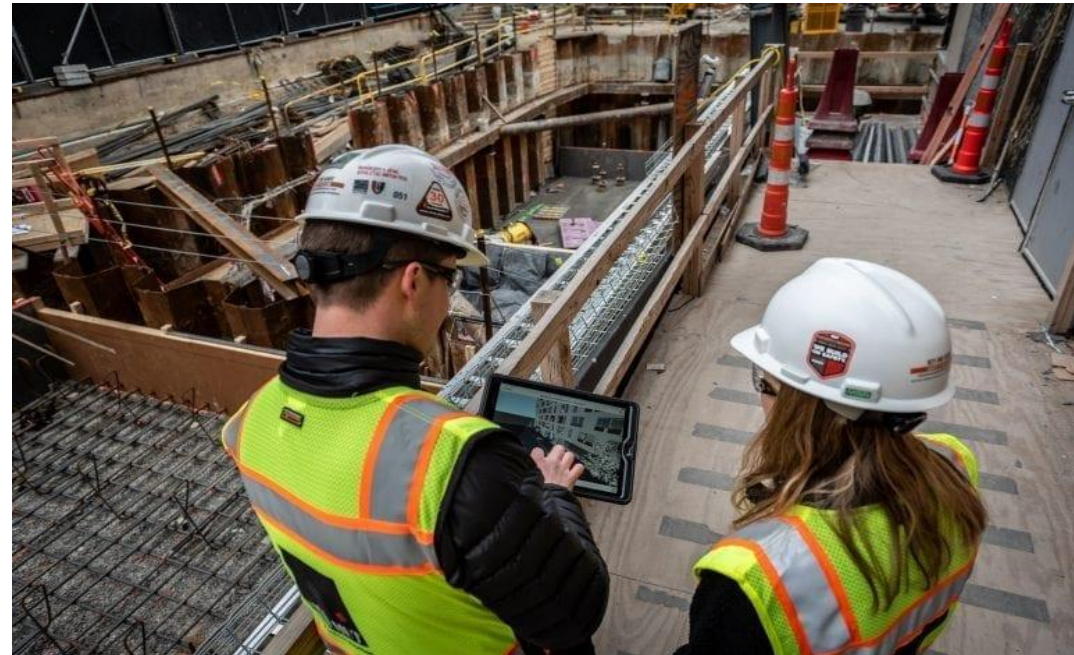


Core Component Assessment Practices and Principles

Welcome to an overview of the T Level
Employer Set Project (ESP)

Building Service Engineering (BSE)
and Onsite Construction



Webinar Platform



Send any questions in the question area throughout the webinar



All attendees will be in listen only mode



Webinar resources and a CPD certificate will be sent out to all attendees the following day

Introduction to BSE and Onsite T Level Team



Jason Howe

Technical Advisor- Construction

M: 07912 042313

Jason.Howe@cityandguilds.com



Michael Scarrott

Product Specialist- EAL

M: 07970 772015

Michael.Scarrott@eal.org.uk



Rob Mallender

Technical Advisor- BSE

M: 07789 926163

Robert.Mallender@cityandguilds.com



Alison Whittle

Technical Advisor- Post 16

M: 07808330385

Alison.Whittle@cityandguilds.com

Curriculum planning

- Link to examples of curriculum planners

<https://www.cityandguilds.com/tlevels/construction-bse>

- Link to curriculum planning webinar

https://youtu.be/QQ0A_A5qXZY

- Link to curriculum planning slides [here](#)

- Key dates- [onsite-construction-key-dates](#) [bse-key-dates](#)

Agenda

1	Overview of the core assessments
2	Employer set Project (ESP)
3	Assessment window-tasks-timings-evidence required
4	What's being assessed
5	Assessment objectives
6	Q&A



- Overview of Core assessment
- The assessment requirements of the ESP Core
- Evidence



- Occupational specialisms
- Progression
- Industry placements
- Reviewing content

Will there be any additional support for uploading of evidence?

Yes, there will be a Summer 2022 guide for the ESP published mid March

When will the ESP be released to centres?

The ESP will be available to centres on 28th March- you will be notified how you can access this. All 6 tasks will be released to you at the same time to help you plan your assessments.

When can I release the ESP to learners?

The ESP is administered to learners during the assessment window which opens on 4th April and closes on 13th May 2022.

Q&A

How is the ESP marked and graded?

The ESP is externally marked by C&G—an overview of how this is marked is covered in the webinar presentation

***It is crucial that centres read all of the assessment documentation ahead of delivering the assessments.**

Can learners retake/resit the ESP and if so, when?

Yes there is an opportunity for a resit/retake in the autumn series which runs from 7th November to 2nd December 2022

What does each task consist of ?

How is the ESP structured, what do learners have to do?

What evidence do I need to provide to C&G ?

Q&A

All these questions are answered in the webinar presentation

What do we need to do to keep assessment evidence secure?

How long do learners have to complete the ESP?

Overview of the Core Assessments

BSE

Technical qualification scheme of assessment overview

Core Component – Learners must complete all assessment components

Assessment component (number)	Method	Duration	Marks	Weighting	Marking	Grading
Exam paper 1 (031)	Externally set exam	2.5 hours	110	35%	Externally marked	This component will be awarded on the grade scale A* - E
Exam paper 2 (032)	Externally set exam	2.5 hours	110	35%	Externally marked	
Employer-set project (033)	Externally set project	17 hours	100	30%	Externally marked	

Onsite Construction

Technical Qualification Scheme of Assessment overview

Core Component – Learners must complete all assessment components

Assessment component (number)	Method	Duration	Marks	Weighting	Marking	Grading
Exam paper 1 (031)	Externally set exam	2 hours	90	35%	Externally marked	This component will be awarded on the grade scale A* - E
Exam paper 2 (032)	Externally set exam	2 hours	90	35%	Externally marked	
Employer set project (033)	Externally set project	17 hours	100	30%	Externally marked	

ESP assessment windows summer/autumn series (inc retake/resit)

Summer 2022 assessment series/results

8711-033 Onsite Construction Employer Set Project (ESP)	4 April 2022 – 13 May 2022
---	----------------------------

Restricted release of TQ component results data to centres	17 August 2022
--	----------------

Release of results from centres to students	18 August 2022
---	----------------

Summer 2022 assessment series/results

8710-033 Building Services Engineering Employer Set Project (ESP)	4 April 2022 – 13 May 2022
---	----------------------------

Restricted release of TQ component results data to centres	17 August 2022
--	----------------

Release of results from centres to students	18 August 2022
---	----------------

Autumn 2022 assessment series/results

8711-033 Onsite Construction Employer Set Project (ESP)	7 November 2022 – 2 December 2022
---	-----------------------------------

Restricted release of TQ component results data to centres	15 March 2023
--	---------------

Release of results from centres to students	16 March 2023
---	---------------

Autumn 2022 assessment series/results

8710-033 Building Services Engineering Employer Set Project (ESP)	7 November 2022 – 2 December 2022
---	-----------------------------------

Restricted release of TQ component results data to centres	15 March 2023
--	---------------

Release of results from centres to students	16 March 2023
---	---------------

The Employer Set Project (ESP)

Core Assessment BSE/Onsite



What is the ESP ?

The employer-set project is a classroom-based assessment undertaken in controlled conditions, as prescribed within the candidate and centre guidance packs.

The core employer set project (ESP) sub-component assesses the skills and application of the core knowledge of the TQ.

The project is linked to the core skills: the candidate and centre guidance packs.

- Problem solving
- Research
- Communication
- Working collaboratively with others

The ESP is in the form of a realistic brief to be achieved through completion of research, plan, present, review tasks designed to elicit appropriate evidence for assessment under specified assessment conditions.

The majority of the tasks are classroom-based tasks plus a presentation.

A new brief and tasks will be set each series covering different topics.

More Information on the ESP

- The employer-set project samples content from across the core of the Technical Qualification (TQ). However, due to their importance all versions of the employer-set project will cover content from the following core underpinning knowledge outcomes of :

BSE

- Health and safety
- Construction design principles
- Sustainability principles
- Building services engineering (BSE) systems

Onsite

- Health and safety in construction
- Construction design principles
- Construction sustainability principles

Assessment overview:

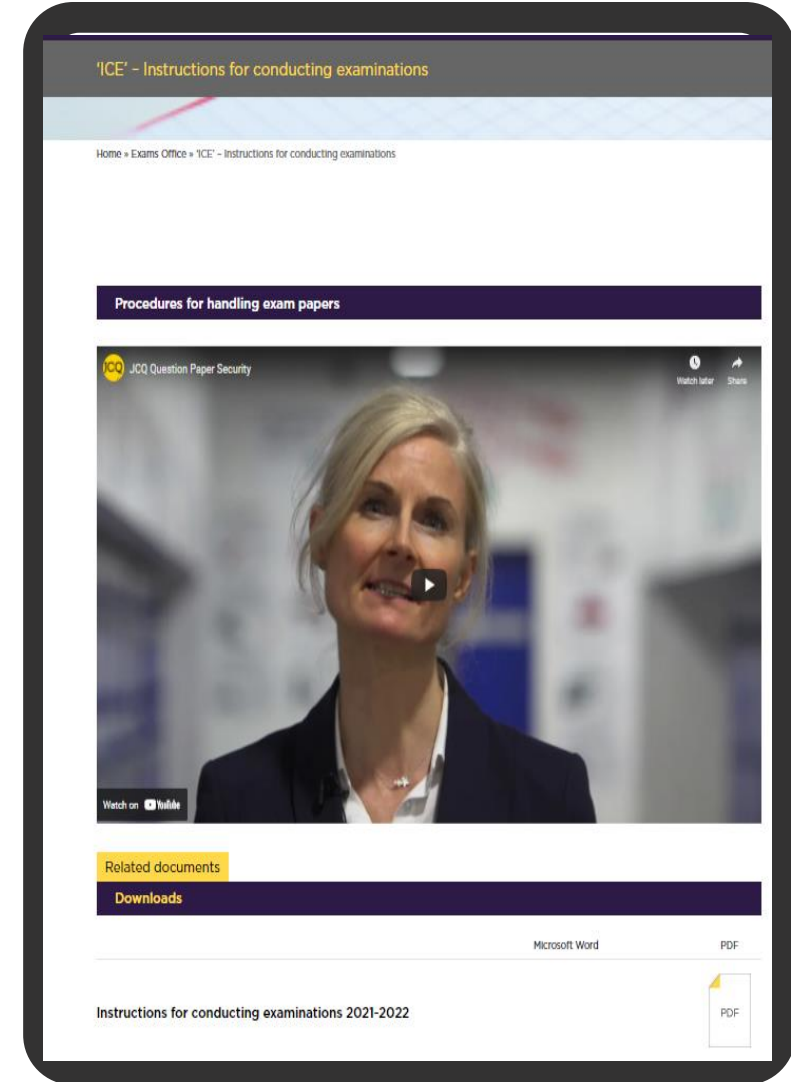
The project only draws on the content from the common core knowledge and skills content that sit across all core modules for BSE **OR** Onsite construction.

Learners will be marked on the quality and accuracy of the written work they produce.

Security of Assessments

- There will be specific guidance within the centre and candidate guidance pack relating to this
- Candidate evidence must be kept secure to prevent unsupervised access by the candidate or others
- Where evidence is produced over a number of sessions, the tutor must ensure candidates and others cannot access the evidence without supervision
- This might include storing written work or artefacts in locked cupboards and collecting memory sticks of evidence produced electronically at the end of each session.

<https://www.jcq.org.uk/exams-office/ice---instructions-for-conducting-examinations/>



<https://youtu.be/q-2rFsf5lw>

How the Employer Set Project (ESP) is structured (sample)

Consists of a number of different tasks (6 in total)

Task	Time allocated	Marks
1.1 – Research	3 hours	9 marks
1.2 – Report	6 hours	26 marks
1.3 – Project plan	3 hours	24 marks
1.4 – Presentation	2 ½ hours	18 marks
2.1 – Collaborative problem-solving	1 ½ hours	15 marks
2.2 – Evaluation	1 hour	8 marks
	Total time 17 hours	Total marks 100 marks

- ***Tasks must be released to candidates in order of sequence and one task at a time
- The time allocated and allocation of marks are not related
- It is the weighting and level of skills being assessed that determine the marks for each task.

Task		Conditions	Evidence produced	Evidence submitted?	* Timings
1.1	Research	Supervised/ controlled	Research notes, record of sources	Yes	3 hours
1.2	Report	Supervised/ controlled	Report Record of sources	Yes	6 hours
1.3	Project plan	Supervised/ controlled	Programme of work and supporting statement	Yes	3 hours
1.4	Presentation	Supervised/ controlled	Video recording of presentation Presentation materials – e.g. slides, handouts etc. Assessor observation record	Yes	2 ½ hours
2.1	Collaborative problem- solving	Supervised/ controlled	Video recording of discussions Written discussion notes Email draft Assessor observation record	Yes	1 ½ hours
2.2	Evaluation	Supervised/ controlled	Evaluation account	Yes	1 hour
Total timing					17 hours

Assessment Objectives and Weightings-Employer Set project

Assessment objective	Typical evidence (examples in brief)	Approximate weighting and marks
AO1 Planning skills and strategies	Clearly structured response to brief, cohesive response with ordered sections, logical approach to referencing, research and sources	14%
AO2 Apply knowledge and skills to the context of the project	Relevant core knowledge applied to respond to brief, references relevant legislation, building controls, materials, concepts, waste disposal and site access considerations.	54%
AO3 Select relevant techniques and resources to meet the brief	Techniques and resources are relevant to the task undertaken.	10%
AO4 Use maths, English and digital skills	Use of correct terminology, abbreviations, units of measurement in context, (technical versus nontechnical wording), use of calculations/graphs etc appropriately, consideration of the use of ICT in presentation.	16%
AO5 Carry out tasks and evaluate for fitness for purpose	Considered analysis and evaluation of project outcome, what went well and what could be improved.	6%

Assessment objectives

The Employer-Set Project is assessed against five assessment objectives (AOs). The assessment objectives are mapped against each task within the marking grids:

	Assessment Objective
AO1	Plan their approach to meeting the project brief
AO2	Apply core knowledge and skills as appropriate
• AO2a	○ core knowledge
• AO2b	○ core skills <ul style="list-style-type: none">- i) communication e.g. providing information and advice to customers and / or wider stakeholders on the potential risks of a change to an industrial system, or making a presentation to a stakeholder on the implications of change- ii) work collaboratively with other team members and stakeholders e.g. to develop content to bid for a construction project- iii) applying a logical approach to solving problems, identifying issues and proposing solutions e.g. through setting criteria for successful implementation of a system, using cost / benefit analysis of the introduction of new procedures or equipment- iv) primary research e.g. obtaining measurements related to a design and / or customer requirement.
AO3	Select relevant techniques and resources to meet the brief
AO4	Use maths, English and digital skills as appropriate
• AO4a	○ maths
• AO4b	○ English
• AO4c	○ digital
AO5	Realise a project outcome and review how well the outcome meets the brief
• AO5a	○ realise a project outcome – was the right outcome achieved
• AO5b	○ review how well the outcome meets the brief, how well was the brief met, the quality of the outcome in relation to the brief

Employer-Set Project mark distribution

This table illustrates how the 100 marks for the Employer-Set Project are distributed against the tasks and mapped to each assessment objective. These have been set by subject matter experts and employers and will support the comparability between versions of the Employer-Set Project over time.

Tasks	AO1	AO2a	AO2b	AO3	AO4a	AO4b	AO4c	AO5a	AO5b	Total
Part 1										
1.1 Research	2	3	0	2	0	0	2	0	0	9
1.2 Report	6	6	6	2	2	2	2	0	0	26
1.3 Project plan	4	10	6	2	2	0	0	0	0	24
1.4 Presentation	2	6	6	2	0	2	0	0	0	18
Total	14	25	18	8	4	4	4	0	0	77
Part 2										
2.1 Collaborative problem-solving	0	6	5	2	0	0	0	2	0	15
2.2 Evaluation	0	0	0	0	0	4	0	0	4	8
Total	0	6	5	2	0	4	0	2	4	23
AO	14	54		10	16			6		100

Research 1.1

(The logical investigation into and study of materials and sources in order to establish facts and reach new conclusions).

(3 hours) (9 marks)

Employer-Set Project mark distribution

This table illustrates how the 100 marks for the Employer-Set Project are distributed against the tasks and mapped to each assessment objective. These have been set by subject matter experts and employers and will support the comparability between versions of the Employer-Set Project over time.

Tasks	AO1	AO2a	AO2b	AO3	AO4a	AO4b	AO4c	AO5a	AO5b	Total
Part 1										
1.1 Research	2	3	0	2	0	0	2	0	0	9

Evidence required: Research notes and a record of where they sourced these notes from.

Task-specific requirements and considerations

- Candidates should have access to the Internet in order to conduct research
- Research notes are likely to cover a **minimum** of 3 sides of A4
- Candidates should be reminded to keep a record of their sources as these have to be submitted as evidence.

1.2 – Report-(written account of something that has been investigated)

(6 hours) (26 marks)

Employer-Set Project mark distribution										
This table illustrates how the 100 marks for the Employer-Set Project are distributed against the tasks and mapped to each assessment objective. These have been set by subject matter experts and employers and will support the comparability between versions of the Employer-Set Project over time.										
Tasks	AO1	AO2a	AO2b	AO3	AO4a	AO4b	AO4c	AO5a	AO5b	Total
1.2 Report	6	6	6	2	2	2	2	0	0	26

Evidence required: Report minimum 1500 words and a record of where they sourced their information from.

Task-specific requirements and considerations

- Candidates should be reminded to include details of sources referenced. **Sources** and **references** are not included in the minimum 1,500 word count.
- Sessions can be split –to help aid delivery. e.g. where timetabling of an appropriate location for six hours is not possible, where centres access to computer resources is limited, or where candidates are not available for six consecutive hours (e.g. due to work placement commitments).
- Where necessary sessions can be timetabled over consecutive days. candidates are required to complete a declaration of authenticity along with their evidence submission.
- If the six-hour session is broken into two three-hour sessions, candidates work must be held securely between sessions

1.3 – Project plan

(A project plan outlines everything that's needed to create a successful project) **(3 hours) (24 marks)**

Employer-Set Project mark distribution										
This table illustrates how the 100 marks for the Employer-Set Project are distributed against the tasks and mapped to each assessment objective. These have been set by subject matter experts and employers and will support the comparability between versions of the Employer-Set Project over time.										
Tasks	AO1	AO2a	AO2b	AO3	AO4a	AO4b	AO4c	AO5a	AO5b	Total
Part 1										
1.3 Project plan	4	10	6	2	2	0	0	0	0	24

Evidence required: programme of work and a supporting statement

Task-specific requirements and considerations

Programme of work plan- to include:

- Key stages of the project
- Detail of which trades will be involved in the project in relation to your chosen technology
- Duration
- The order in which activities will be completed in and their dependencies.

A supporting statement to justify your plan, (approx. 750 words) taking into consideration:

- Health and safety (access and egress)
- Specialist equipment
- Specialist contractors
- Waste management
- How key job roles work within this project

1.4 – Presentation

(conveys information from a speaker to an audience)

(2.5 hours) (18 marks)

Employer-Set Project mark distribution

This table illustrates how the 100 marks for the Employer-Set Project are distributed against the tasks and mapped to each assessment objective. These have been set by subject matter experts and employers and will support the comparability between versions of the Employer-Set Project over time.

Tasks	AO1	AO2a	AO2b	AO3	AO4a	AO4b	AO4c	AO5a	AO5b	Total
Part 1										
1.4 Presentation	2	6	6	2	0	2	0	0	0	18

Task-specific requirements and considerations (please refer to centre guidance for full explanation)

- Candidates do not have to use technology to present their findings, but this is encouraged
- Candidates' presentations should be scheduled and timed to include time for questioning following the presentation within the 30 minutes allocation
- All candidates must be asked three questions following their presentation (probing or clarification question not included). The nature of the questions should relate to the content of their presentation. Questions should be posed from the perspective of a client tendering for a construction project and should allow candidates to expand upon and reinforce points covered in their presentation
- Examples of types of questions to include are in the centre guidance

Task 1.4 presentation (continued)

Evidence required:

- **Video recording of presentation-** It should be clear from supporting video evidence which candidate it is attributed to, e.g. by the candidate stating their name during the introduction or the video file name including the name and candidate number.
- **Presentation materials** – e.g. slides, handouts etc.
- **Assessor observation record-** Before assessing task 1.4, tutors should read through the marking grid to ensure they are clear about the points they should be looking for when observing. Tutors should refer to the marking grid to ensure appropriate aspects are recorded.

2.1 – Collaborative problem-solving

(A team approach, a collaboration between peers who help one another solve a problem).

(1 ½ hours) (15 marks)

Employer-Set Project mark distribution										
This table illustrates how the 100 marks for the Employer-Set Project are distributed against the tasks and mapped to each assessment objective. These have been set by subject matter experts and employers and will support the comparability between versions of the Employer-Set Project over time.										
Tasks	AO1	AO2a	AO2b	AO3	AO4a	AO4b	AO4c	AO5a	AO5b	Total
Part 2										
2.1 Collaborative problem-solving	0	6	5	2	0	0	0	2	0	15

Task-specific requirements and considerations (please refer to centre guidance for full explanation)

- Candidates should be divided into groups of two or three in order to conduct the discussion element of the task
- Candidates should move directly to drafting the email after the discussions are conducted
- A record of candidates' discussions, interactions collaboration must be included on the assessor observation record - in addition all discussions must be video recorded to support observation records to be completed
- The email should be a minimum of 300 words long.

Task 2.1 collaborative problem solving (evidence required)

- **Video recording of discussions**-all discussions must be video recorded to support observation records to be completed. Recording must be available for marking and moderation purposes and in a suitable format.
- **Written discussion notes**- from the group discussion
- **Email draft**-the email should be a minimum of 300 words long
- **Assessor observation record**- A record of candidates' discussions, interactions collaboration must be included on the assessor observation record

2.2 – Evaluation

How well did the project outcome meet the requirements of the brief

(1 hour) (8 marks)

What went well? what didn't go well? what would I do differently?

Employer-Set Project mark distribution

This table illustrates how the 100 marks for the Employer-Set Project are distributed against the tasks and mapped to each assessment objective. These have been set by subject matter experts and employers and will support the comparability between versions of the Employer-Set Project over time.

Tasks	AO1	AO2a	AO2b	AO3	AO4a	AO4b	AO4c	AO5a	AO5b	Total
2.2 Evaluation	0	0	0	0	0	4	0	0	4	8
Total	0	6	5	2	0	4	0	2	4	23
AO	14	54		10	16			6		100

Evidence required: Evaluation account in their chosen format

Task-specific requirements and considerations

- The evaluation account should be a minimum of 750 words long.
- Candidates can structure their evaluation account in the way they feel is most clear and appropriate.

Assessment Objectives and Weightings-Employer Set project

Assessment objective	Typical evidence (examples in brief)	Approximate weighting and marks
AO1 Planning skills and strategies	Clearly structured response to brief, cohesive response with ordered sections, logical approach to referencing, research and sources	14%
AO2 Apply knowledge and skills to the context of the project	Relevant core knowledge applied to respond to brief, references relevant legislation, building controls, materials, concepts, waste disposal and site access considerations.	54%
AO3 Select relevant techniques and resources to meet the brief	Techniques and resources are relevant to the task undertaken.	10%
AO4 Use maths, English and digital skills	Use of correct terminology, abbreviations, units of measurement in context, (technical versus nontechnical wording), use of calculations/graphs etc appropriately, consideration of the use of ICT in presentation.	16%
AO5 Carry out tasks and evaluate for fitness for purpose	Considered analysis and evaluation of project outcome, what went well and what could be improved.	6%

Assessment objectives

The Employer-Set Project is assessed against five assessment objectives (AOs). The assessment objectives are mapped against each task within the marking grids:

	Assessment Objective
AO1	Plan their approach to meeting the project brief
AO2	Apply core knowledge and skills as appropriate
• AO2a	○ core knowledge
• AO2b	<ul style="list-style-type: none"> ○ core skills - i) communication e.g. providing information and advice to customers and / or wider stakeholders on the potential risks of a change to an industrial system, or making a presentation to a stakeholder on the implications of change - ii) work collaboratively with other team members and stakeholders e.g. to develop content to bid for a construction project - iii) applying a logical approach to solving problems, identifying issues and proposing solutions e.g. through setting criteria for successful implementation of a system, using cost / benefit analysis of the introduction of new procedures or equipment - iv) primary research e.g. obtaining measurements related to a design and / or customer requirement.
AO3	Select relevant techniques and resources to meet the brief
AO4	Use maths, English and digital skills as appropriate
• AO4a	○ maths
• AO4b	○ English
• AO4c	○ digital
AO5	Realise a project outcome and review how well the outcome meets the brief
• AO5a	○ realise a project outcome – was the right outcome achieved
• AO5b	○ review how well the outcome meets the brief, how well was the brief met, the quality of the outcome in relation to the brief

Employer-Set Project mark distribution

This table illustrates how the 100 marks for the Employer-Set Project are distributed against the tasks and mapped to each assessment objective. These have been set by subject matter experts and employers and will support the comparability between versions of the Employer-Set Project over time.

Tasks	AO1	AO2a	AO2b	AO3	AO4a	AO4b	AO4c	AO5a	AO5b	Total
Part 1										
1.1 Research	2	3	0	2	0	0	2	0	0	9
1.2 Report	6	6	6	2	2	2	2	0	0	26
1.3 Project plan	4	10	6	2	2	0	0	0	0	24
1.4 Presentation	2	6	6	2	0	2	0	0	0	18
Total	14	25	18	8	4	4	4	0	0	77
Part 2										
2.1 Collaborative problem-solving	0	6	5	2	0	0	0	2	0	15
2.2 Evaluation	0	0	0	0	0	4	0	0	4	8
Total	0	6	5	2	0	4	0	2	4	23
AO	14	54		10	16			6		100

Example breakdown of AOs and marks for task 1.1

Note: where there is insufficient evidence to award a mark, a zero mark may be given	Band 1 descriptor			Band 2 descriptor			Band 3 descriptor			AO	Total marks available
	1	2	3	4	5	6	7	8	9		
Task 1.1										AO1	9
Research	<p>Some evidence of a planned approach to research, results lack order and organisation.</p> <p>Some elements of Core knowledge referenced but focus may be imbalanced and more focused on one area than another (e.g. focus on environmental benefits more than financial etc).</p>			<p>Approach to research and collation of information is planned and organised.</p> <p>The application of Core knowledge is referenced consistently for example in relation to legislation/regulation, referencing and health and safety considerations.</p> <p>Evidence of a range of sources used and referenced, with different sources considered.</p> <p>Digital skills applied consistently in the sourcing and collation of materials.</p>			<p>Brief requirements fully considered prior to and throughout research and information collation – clear evidence of methodical and thorough approach to research and information gathering. Systematic and comprehensive research conducted, including detailed list of sources in line with industry standards.</p> <p>Core knowledge applied in all areas of the brief requirements including - costs, impacts on building performance, environmental benefits, financial benefits, laws/regulations related to installation and maintenance.</p> <p>Evidence of a full range of sources including non-traditional sources e.g. social media.</p>			AO2a AO3 AO4c	

How the ESP is marked and graded

The ESP is externally marked by C&G using evidence you will need to upload.

[illegible][illegible]

**T Level Technical Qualification in
Building Services Engineering for
Construction
(8710-30)**

Employer-Set Project – Brief and resources

T Level Employer-Set Project – BSE (Brief and resources)

City
of
Guides

11

UMS (Max 80)	Raw Mark	UM
64	61	
56	55	
48	49	
40	43	
32	37	

Peter's mark is mapped to 48 on the UMS scale. Sally's mark is mapped to 64 on the UMS scale.

Exam paper 1
raw marks
(actual marks)

**Exam paper 2
raw marks
are combined and
Converted using a
uniform mark scale
(UMS)**

ESP raw mark is converted to a UMS

**Final core grade of
A*- U generated**

To summarise

Evidence required by C&G

Task	Evidence expected for marking
1.1 Research	Research notes (approximately 3 sides of A4)
1.1 Research	Record of sources
1.2 Report	Report (1,500 words minimum, 2,500 words maximum).
1.3 Project Plan	Programme of work plan and supporting statement (approximately 750 words)
1.4 Presentation	Presentation materials including presentation file and any handouts
1.4 Presentation	Video recording of presentation
1.4 Presentation	Observation record
2.1 Collaborative problem solving	Written discussion notes.
2.1 Collaborative problem solving	Drafted email (300 words minimum)
2.1 Collaborative problem solving	Tutor's observation notes on contribution to discussions.
2.1 Collaborative problem solving	Video recording of discussions.
2.2 Evaluation	Evaluation account (minimum 750 words)

Key dates:

- The ESP will be available to centres on 28th March- you will be notified how you can access this. All 6 tasks will be released to you at the same time to help you plan your assessments.
- The ESP is administered to learners during the assessment window which opens on 4th April and closes on 13th May 2022.

Thank you

Q&A

Survey link

<https://forms.office.com/r/EuZNg3Rbpx>

