



Training
Qualifications UK

Qualification Specification

TQUK Level 1 International Certificate in Design, Engineering, and Construction in the Digital Built Environment (RQF)

Qualification Number: 610/3226/8

Version 2

Contents

Summary of changes	3
Introduction	4
Welcome to TQUK.....	4
Centre Recognition	4
Qualification Specifications.....	5
Use of TQUK Logo, Name and Qualifications.....	5
The Qualification	6
Qualification Purpose	6
Entry Requirements	7
Progression	7
Structure	8
Guided Learning Hours.....	8
Directed Study Requirements.....	8
Total Qualification Time.....	8
Assessment	9
Centre Devised Assessment (CDA) Guidance	10
Course Delivery.....	10
Learner Registration.....	11
Tutor, Assessor and Internal Quality Assurer Requirements.....	11
External Quality Assurance	12
Useful Websites.....	12
Mandatory Units	14
Defining a sustainable construction project	14
Roles in construction project teams	16
Producing a technical design and sharing information.....	18
Planning permission, costing, and presenting a sustainable building project	20

Summary of changes

The following table provides a summary of the changes that have been made to the qualification specification since the publication of the previous version.

Version number	Summary of changes
V2	Generic information updated as part of the qualification rebranding

Introduction

Welcome to TQUK

Training Qualifications UK (TQUK) is an Awarding Organisation recognised by the Office of Qualifications and Examinations Regulation (Ofqual) in England and CCEA Regulation in Northern Ireland.

TQUK offers qualifications which are regulated by Ofqual and, in some cases, by CCEA Regulation. All regulated TQUK qualifications sit on the Regulated Qualifications Framework (RQF) and are listed on the [Register of Regulated Qualifications](#).

Our qualifications are designed to support and encourage learners to develop their knowledge and skills. This development may result in progression into employment or career development in the workplace. Our qualifications also allow learners to progress onto further qualifications. Please visit our [website](#) for news of our new and coming soon developments.

Centre Recognition

To offer any TQUK qualification a centre must be recognised by TQUK.

The TQUK centre recognition process requires a centre to have in place a number of policies and procedures to protect the learners undertaking a TQUK qualification and the integrity of TQUK's qualifications. These policies and procedures will also support a recognised centre's quality systems and help support the centre to meet the qualification approval criteria.

Recognised centres must seek approval for each qualification they wish to offer.

The approval process requires centres to demonstrate that they have sufficient resources, including suitably qualified and occupationally competent staff to deliver, assess and quality assure the qualification, and access to appropriate support in the form of specialist resources. Qualification approval must be confirmed prior to any assessment of learners taking place.

Qualification Specifications

Each qualification which TQUK offers is supported by a specification that includes all the information required by a centre to deliver a qualification. Information in the specification includes unit information, assessment and learning outcomes.

The aim of the qualification specification is to guide a centre through the process of delivering the qualification.

Please read it alongside the TQUK Centre Handbook. Details of TQUK's procedures and policies can be found on our [website](#).

Qualification specifications can also be found on our [website](#). If you have any further questions, please contact TQUK.

Centres must ensure they are using the most recent version of the qualification specification for planning and delivery purposes.

Reproduction of this document

Centres may reproduce the qualification specification for internal use only but are not permitted to make any changes or manipulate the content in any form.

Centres must ensure they use the most up-to-date pdf version of the specification.

Use of TQUK Logo, Name and Qualifications

TQUK is a professional organisation and the use of its name and logo is restricted. TQUK's name may only be used by recognised centres to promote TQUK qualifications. Recognised centres may use the logo for promotional materials such as on corporate/business letterheads, pages of a centre's website relating to TQUK qualifications, printed brochures, leaflets or exhibition stands.

When using TQUK's logo, there must be no changes or amendments made to it, in terms of colour, size, border or shading. The logo must only be used in a way that easily identifies it as TQUK's logo. Any representation of TQUK's logo must be done so as a representation of the true logo.

It is the responsibility of the centre to monitor the use and marketing of TQUK's logos and qualifications on their own materials as well as on those of any re-sellers or third parties that they may use. TQUK must be made aware of relationships with re-sellers of TQUK Qualifications. TQUK must be made aware of any additional websites where the Centre intends to use TQUK's name and/or logo. If this information is changed, TQUK should be notified. TQUK is required to monitor a centre's websites and materials to ensure that learners are not being misled.

If a centre ceases to be/surrenders recognition as a TQUK centre, it must immediately discontinue the use of TQUK's logo, name and qualifications from all websites and documents where they appear.

The Qualification

The TQUK Level 1 International Certificate in Design, Engineering, and Construction in the Digital Built Environment is regulated by Ofqual.

The qualification was developed in association with Class Of Your Own® Limited (COYO).

COYO has licensed the intellectual property rights in the Design, Engineer, Construct! The Digital Built Environment Learning Programme to TQUK, on an exclusive basis, for incorporation into the TQUK Design, Engineering, and Construction in the Digital Built Environment (DEC) qualifications.

The DEC learning programme has been designed to be highly adaptable and can be localised to meet the building regulations and standards specific to each country where it is delivered. This adaptability ensures the curriculum remains relevant, practical and wholly inclusive.

Qualification Purpose

The Level 1 International Certificate in Design, Engineering, and Construction in the Digital Built Environment is an introductory qualification for learners looking to explore professional practice in the digital built environment and provides an excellent foundation for learning for progression to Level 2.

The Design, Engineer, Construct! Learning Programme (DEC) has gained a solid reputation as being "the most innovative, challenging and relevant curriculum development in recent years", championed by respected leaders, and referenced in numerous national reports.

The qualification provides learners with an introduction to the subject area that can lead to a meaningful career that can positively impact society given the focus on sustainability and innovation in the construction industry. Learners will gain holistic knowledge and skills in:

- STEM and digital engineering
- Project-based learning
- Sustainable development goals
- Net zero and modern construction methods
- Collaborative working
- Problem solving.

Learners will design a small, community-focused building – a highly sustainable and inclusive building that offers flexible use for diverse groups – with a brief to teach local communities about everyday environmentally-friendly living.

This level 1 qualification is an experiential learning programme – learners develop and deliver a fit-for-purpose, functional design, taking on the roles of key built environment professionals, such as architects, engineers, surveyors, and facilities managers.

A key objective is to develop the knowledge and skills required to define, develop and deliver a digital construction project from concept to handover, encouraging learners to focus on their impact on the end-user, the wider community, and the environment, setting standards for resource efficiency, and committing to sustainable procurement.

Learners will understand the need for accurate technical information regarding the proposed site, and the constraints and challenges a site can present. Using building information modelling (BIM) methodologies and software, the project will be developed from the concept stage to feasibility and planning, creating a digital model that incorporates the main architectural, structural and services detail. Learners will explore the lifecycle of the building focusing on operation and management, maintenance and costs.

Visits to live construction sites in a **safe and secure environment** can be facilitated by a local company through Class of Your Own's "Adopt a School" programme. Alternatively, learners can use a local site they can **safely** visit or an area of their existing school grounds as the 'building site' location of their building, enabling ease of access to a safe, outdoor space in which they can explore key topics such as spatial requirements, orientation and access.

Learners are empowered to take ownership of their project and we recommend they are also given the opportunity to liaise with their 'client' – the local community itself - through the involvement of learners' families, teachers, and governors.

Where possible, we recommend learners are given access to professional volunteers, such as through the Class Of Your Own '[Adopt A School](#)' scheme. For further information, contact support@classofyourown.com.

Entry Requirements

The qualification is accessible to learners in secondary schools, University Technical Colleges, Further Education Colleges, International Schools and other educational institutions.

There are no specific entry requirements, however, learners should have a minimum of level one in literacy and numeracy or equivalent. The qualification is suitable for learners aged 13 and above.

Centres should ensure that any learner registered on a TQUK qualification undertakes an initial assessment to ensure they can complete the course in full. The outcomes of the process inform:

- Early judgements about the learner
- The focus and level of learning
- The skills and needs that will be developed and supported.

A review of a learner's prior achievements, well-managed interviews and diagnostic tests are all suitable forms of initial assessment.

Progression

This qualification provides an opportunity to progress to the level 2 International Certificate in Design, Engineering, and Construction in the Digital Built Environment and to access further education. It can provide access to a wide range of future career pathways, including architecture and architectural technology, geospatial and property surveying, quantity surveying and cost management, information management, civil, structural and building services engineering, and construction project management.

The qualification complements other subject areas at level 1, such as mathematics, physics, engineering, computer science, art, geography, environmental studies, business studies, and design technologies to broaden the curriculum. The qualification provides learners with a foundation of transferable knowledge and skills to support access to wider industry opportunities, for example in town planning, property and real estate, environmental and sustainability, creative and digital, financial, and legal sectors.

Learners wishing to access traditional trade and craft and advanced manufacturing destinations will have a more rounded approach to the built environment, understanding the basic principles of building design processes.

Structure

Learners must complete all four mandatory units to achieve the qualification.

Mandatory units

Title	Unit ref.	Level	Guided learning hours	Credit value
Defining a sustainable construction project	M/650/8384	1	20	5
Roles in construction project teams	R/650/8385	1	60	9
Producing a technical design and sharing information	Y/650/8387	1	20	5
Planning permission, costing, and sharing information	A/650/8388	1	20	5

Guided Learning Hours

These hours are made up of all contact time, guidance, or supervision of a learner by a lecturer, supervisor, tutor, trainer or other appropriate provider of education or training.

GLH for this qualification is 120 hours.

Directed Study Requirements

Learners are expected to study and complete aspects of their assessment portfolio in their own time. This additional time is expected to be approximately 120 hours over the cycle of the qualification.

Total Qualification Time

This is an estimate of the total length of time it is expected that a learner will typically take to achieve and demonstrate the level of attainment necessary for the award of the qualification to achieve all learning outcomes.

Total Qualification Time (TQT) is comprised of GLH and an estimate of the number of hours a learner is likely to spend in preparation, study or any other learning including assessment which takes place as directed by, but not under the supervision of, a lecturer, supervisor, or tutor. The credit value for a qualification, where given, is determined by TQT, as one credit corresponds to 10 hours of learning.

The total Qualification Time for this qualification is 240 hours.

Assessment

It is essential that all learners are assessed in English unless the qualification specification specifically states that another language may be accepted. This ruling also applies to all learner evidence presented for external quality assurance purposes.

The qualification is ungraded and is assessed by internally-set and marked assessments subject to external quality assurance.

All learning outcomes which assess knowledge and understanding (usually beginning with 'understand' or 'know how to') may be assessed through, for example, internally set and marked written assignments, tasks, records of oral or written questions, workbooks, or other portfolio evidence.

Where learning outcomes require the demonstration of practical skills and confirmation of workplace competence (usually learning outcomes beginning with 'be able to'), the portfolio evidence must include observation of learner performance in real work situations.

Materials for internal assessment must be submitted to TQUK for approval before use and must be mapped to the relevant unit, learning outcome and assessment criteria.

All learning outcomes and assessment criteria must be met to achieve a pass. This qualification is not graded.

Each unit within the qualification may have its own assessment requirements, assessment guidance and range.

- **Assessment requirements** are conditions of assessment that must be met by learners when undertaking their assessments to achieve the unit or meet particular assessment criteria
- **Assessment guidance** are areas that could be covered by learners in their assessments to achieve the unit or particular assessment criteria but are not mandatory
- **Range** sets out the scope of what should be taught and may be assessed as part of particular assessment criteria
- **Useful Websites** are resources that could be used by centres for the delivery of the qualification and by learners to support them with the completion of the unit.

Resources

Should the recognised centre wish to offer progression through the DEC suite of qualifications, it is required to have one or more delivery sites which offer facilities to support the programme of learning and assessment. These must comply with health and safety regulations and have in place appropriate access arrangements. All training and/or assessment sites must include the following facilities:

- A practical space to be used for learning and assessment activities. This should offer multimedia facilities such as data projector and laptop, flipchart and pens.
- Architectural model-making facilities (card, foam board).
- A high specification* IT suite and IT hardware

- Industry-standard CAD and BIM software.

The use of industry-standard software is a critical element of the qualification and prepares learners for working life in a modern, digital industry. Hardware and software specifications and training are available from Class Of Your Own. For further information, contact support@classofyourown.com.

Centre Devised Assessment (CDA) Guidance

Centre-devised assessments play a vital role in the evaluation of a learner's progress as they are based on the qualification's learning objectives. They provide learners with the opportunity to evidence the knowledge, understanding, and skills gained while studying the qualification and support teaching staff in monitoring the learner's progress.

As this qualification is internally assessed, TQUK allows centres to produce their own assessments. When designing them, assessors must give consideration to the depth and breadth of knowledge allowed by each task.

TQUK has produced centre guidance on our suggested approaches to designing appropriate assessment tasks, and these may be accessed from our website www.tquk.org. This includes templates to support the design of internal assessments and a checklist to ensure that the assessments are valid and fit for purpose.

To ensure the validity and fairness of our qualifications, centre-devised assessments form part of our quality assurance processes. More information about this and how to prepare for external quality assurance reviews can be found on our website.

Course Delivery

Pre-Course Information

All learners should be given appropriate pre-course information regarding any TQUK qualification. The information should explain the qualification, the fee, the form of the assessment and any entry requirements or resources needed to undertake the qualification.

Initial Assessment

Centres should ensure that any learner registered on a TQUK qualification undertakes some form of initial assessment. The initial assessment should be used to inform a teacher/trainer of the level of the learner's current knowledge and/or skills and any additional specific support requirement the learner may need.

The initial assessment can be undertaken by a teacher/trainer in any form suitable for the qualification to be undertaken by the learner/s. It is the centre's responsibility to make available forms of initial assessment that are valid, applicable and relevant to TQUK qualifications.

Teaching resources

All teaching materials and additional resources used to support the delivery of this qualification must be age-appropriate. Centres must ensure when developing or sourcing delivery materials that careful

consideration is given to the safeguarding and wellbeing of their learners in line with the centre's policies and procedures.

Learner Registration

Once approved to offer a qualification, centres must follow TQUK's procedures for registering learners. Learner registration is at the discretion of the centre and in line with equality legislation and health and safety requirements.

Centres must register learners before any assessment can take place.

Tutor, Assessor and Internal Quality Assurer Requirements

All members of staff involved with the qualification (assessing or IQA) will need to be occupationally competent in the subject area being delivered. This could be evidenced by a combination of:

- A higher level qualification in the same subject area as the qualification approval request
- Experience of the delivery/assessment/IQA of the qualification/s requested
- Work experience in the subject area of the qualifications.

Staff members will also be expected to have a working knowledge of the requirements of the qualification and a thorough knowledge and understanding of the role of tutors/assessors and internal quality assurance. They are also expected to undertake continuous professional development (CPD) to ensure they remain up to date with work practices and developments associated with the qualifications they assess or quality assure.

Tutor

Tutors or trainers who deliver a TQUK qualification must possess a teaching qualification appropriate for the level of qualification they deliver. This can include:

- Further and Adult Education Teacher's Certificate
- Cert Ed/PGCE/Bed/MEd
- PTLLS/CTLLS/DTLLS
- Level 3 Award/Level 4 Certificate/Level 5 Diploma in Education and Training.

Assessor

Staff who assess a TQUK qualification must possess an assessing qualification appropriate for the level of qualification they are delivering or be working towards a relevant qualification and have their assessment decisions countersigned by a qualified assessor. This can include:

- Level 3 Award in Assessing Competence in the Work Environment

- Level 3 Award in Assessing Vocationally Related Achievement
- Level 3 Award in Understanding the Principles and Practices of Assessment
- Level 3 Certificate in Assessing Vocational Achievement
- A1 or D32/D33.

Specific requirements for assessors may be indicated in the assessment strategy/principles identified in individual unit specifications.

Internal Quality Assurer

Centre staff who undertake the role of an Internal Quality Assurer (IQA) for TQUK qualifications must possess or be working towards a relevant qualification and have their quality assurance decisions countersigned by a qualified internal quality assurer. This could include:

- Level 4 Award in the Internal Quality Assurance of Assessment Processes and Practice
- Level 4 Certificate in Leading the Internal Quality Assurance of Assessment Processes and Practice
- V1 Conduct internal quality assurance of the assessment process
- D34 Internally verify the assessment process.

It is best practice that those who quality assure qualifications also hold one of the assessing qualifications outlined above. IQAs must follow the principles set out in Learning and Development NOS 11 - Internally monitor and maintain the quality of assessment.

External Quality Assurance

External Quality Assurance will be undertaken by TQUK to ensure that centres are satisfying TQUK quality assurance compliance with the requirements associated with their TQUK recognised centre status and formal written agreement. This will consist of physical activities and remote reviews.

Useful Websites

- [Office of Qualifications and Examinations Regulation](#)

For further details regarding approval and funding eligibility please refer to the following websites:

- [Education & Skills Funding Agency for public funding information for 14+ learners in England](#)
- [Learning Aim Reference Service \(LARS\)](#)

For more information on Design, Engineer, and Construct and Class Of Your Own, please visit:

- [Design, Engineer, Construct](#)
- [Class Of Your Own](#)
- Chartered Institute of Building: <https://www.ciob.org/>
- Construction Industry Council: <https://www.cic.org.uk/>
- Institution of Civil Engineers: <https://www.ice.org.uk/>
- Architects Registration Board: <https://arb.org.uk/>
- Royal Institute of British Architects: <https://www.architecture.com/>
- Chartered Institute of Architectural Technologists: <https://architecturaltechnology.com/>

- <https://upa-bua-arch.be/en/profession/international-organisations-of-architects>
- Architects Regional Council Asia: <https://www.arcasia.org/>
- USA: <https://www.ncarb.org/about/related-organizations>

A full list of useful links is available through Class Of Your Own's teaching resources and the DEC School eLearning platform. All centres will be invited to use 'DEC School' as their central resource for learning and teaching support.

Mandatory Units

Title:		Defining a sustainable construction project	
Unit reference number:		M/650/8384	
Level:		1	
Credit value:		4	
Guided learning hours:		20	
Learning outcomes The learner will:		Assessment criteria The learner can:	
1.	Understand issues related to sustainability in construction projects.	1.1	Define sustainability in a range of contexts.
		1.2	Identify ways in which sustainability affects the local community.
		1.3	Identify the range and depth of knowledge in the local community related to sustainability.
		1.4	Outline current sustainability issues in the local community.
		1.5	Identify ways of improving sustainability in the local community.
2.	Understand local community issues related to a construction project.	2.1	Produce a report to present the demographic information of the local community.
		2.2	Outline how the community can be engaged in the design and planning of a building project in their role as 'client'.
		2.3	Describe how community members with a range of personal or physical challenges will be considered during the design of the project.
		2.4	Outline how the project impacts the local community and how their views will be taken into account.
		2.5	Explain how a formal meeting should be structured, conducted and recorded.
<p>Assessment guidance:</p> <p>1.1 Learners could define sustainability in a range of different contexts including:</p> <ul style="list-style-type: none"> • Global sustainability, for example, Brundtland Report, Sustainable Development Goals • National sustainability • Local sustainability • Personal sustainability such as, how do I contribute to sustainable living? <p>1.2 Learners could explore ways in which their local community is affected by issues of sustainability. They can investigate:</p> <ul style="list-style-type: none"> • How local systems operate, and research the environmental, economic, and social health benefits of creating a more sustainable future • The ways electricity, water, sewage treatment, refuse collection, and other local government services are provided, and how sustainable these services are • Human behaviour in their community about recycling, litter, wellbeing, tolerance, inclusion and social cohesion. 			

1.3

Learners could devise a questionnaire and encourage their community to participate in their research to ensure that a wide range of data is collected. Research can focus on:

- How people feel about sustainability
- Whether they are adopting measures to be more sustainable
- Whether they value a more sustainable lifestyle.

Learners could evaluate strengths and weaknesses in social, economic and environmental behaviour and conditions in the community.

2.1

Learners could report the following demographic information:

- Population
- Age
- Gender
- Ethnicity.

Learners can use government national statistics websites or find other census information from local government websites and offices to support their reports.

2.2

Learners could devise an appropriate method to engage their local community in contributing towards a vision for a truly inclusive community project. Learners' family members, teaching staff and other relevant individuals may be invited to contribute at this stage to emulate community members. Learners may devise a social media strategy such as how they might use social media to reach the wider community.

2.5

Learners could cover the following items when explaining formal meetings.

- Governing roles and responsibilities
- Meeting minutes
- Importance of accurate record-keeping and advising stakeholders
- Establish the aim of the group and prepare a group plan
- Set an agenda and agree on a method of publicising the minutes to the community.

Title:		Roles in construction project teams	
Unit reference number:		R/650/8385	
Level:		7	
Credit value:		9	
Guided learning hours:		60	
Learning outcomes The learner will:		Assessment criteria The learner can:	
1.	Understand the importance of teams in construction projects.	1.1	Identify the role of teamwork in a successful construction project.
		1.2	Identify the roles and responsibilities of the key members of a construction team.
		1.3	Identify how each team member contributes to the sustainability of a construction project.
2.	Understand the role of the architect.	2.1	Outline the role of an architect.
		2.2	Explain how the architect works with a client on a building project.
		2.3	Identify the key elements and structure of a design brief.
		2.4	Summarise how to use architectural precedents to inform research.
		2.5	Explain the importance of a clear design brief in supporting effective communication with the client.
3.	Understand the role of the building services engineer.	3.1	Outline the role of the building services engineer.
		3.2	Identify services associated with a familiar building.
		3.3	Describe how the behaviour of end-users impacts the efficiency of a building.
		3.4	Identify the symbols that represent building services on a plan (drawing).
		3.5	Describe how end-users impact the sustainable design of a building.
4.	Understand the role of the landscape architect.	4.1	Outline the role of the landscape architect.
		4.2	Describe how natural and synthetic features impact the layout of a landscape design.
		4.3	Explain how the path of the sun affects the positioning of natural and synthetic garden design features.
		4.4	Describe how to use a water level to measure changes in height.
		4.5	Explain how an outdoor learning environment complements a sustainable building project.
		4.6	Produce a detailed landscape plan.
5.	Understand the role of the site engineer.	5.1	Outline the role of a site engineer.
		5.2	Use specific mathematical solutions to solve site engineering problems.
		5.3	Describe considerations that need to be taken into account when orientating a building.
6.	Understand the role of the facilities manager.	6.1	Outline the role of a facilities manager in the context of a familiar building.
		6.2	Describe positive and negative aspects relating to sustainability in a familiar building.

		6.3	Explain how the behaviour of people within a building affects the success of adoption and subsequent sustainability.
		6.4	Relate sustainability research on a familiar building to the development of a building project.
		6.5	Outline resource efficiency guidelines to support the facilities management role.

Assessment requirements:

5.2

Learners must understand how Pythagoras' Theorem ($a^2 + b^2 = c^2$) is used in construction to 'set out' a building. Using two known dimensions for the width and length of a square/rectangular building, they can calculate the hypotenuse of the associated right-angled triangle and use the theorem to ensure their building is perfectly 'square' (it has 90° corners).

Assessment guidance:

2.4

Learners could research local, national, and global examples of existing eco-structures to understand the work of other architects and inform their design.

3.2

Learners could produce a floor plan of their home and identify existing services.

Title:		Producing a technical design and sharing information	
Unit reference number:		Y/650/8387	
Level:		1	
Credit value:		5	
Guided learning hours:		20	
Learning outcomes The learner will:		Assessment criteria The learner can:	
1.	Be able to follow BIM principles using appropriate technologies to produce realistic buildings.	1.1	Identify reasons why BIM is an essential process for the development of a construction project.
		1.2	Produce a 3D model including simple architectural and aesthetic elements using digital software.
		1.3	Demonstrate how to input, organise, and combine information in a 3D environment using digital software.
		1.4	Produce 2D floor plans, elevations, sections, and renders/visualisations.
		1.5	Produce fully annotated drawings on a title sheet using digital software.
2.	Be able to share information effectively.	2.1	Explain the value of professional collaboration and information sharing in a building project.
		2.2	Demonstrate the use of tools and techniques to present a building project in a 3D environment.
		2.3	Explain the impact of natural and artificial light on a building project.
		2.4	Explain how information about the building would be communicated to the client and project team using BIM-enabled CAD technology and methods.

Assessment requirements:

1.5:

Learners must create their own fully annotated drawing sheet complete with floor plans, elevations, and sections at an appropriate scale.

2.1:

Learners must discuss the merits of collaborative working and sharing ideas and information. Learners must recognise that BIM plays a key role in reducing construction resource consumption and promoting sustainability.

Assessment guidance:

Digital Software

DEC Schools have used a range of digital modelling tools to deliver learning outcomes and develop the skills required in modern, professional career pathways. COYO can provide recommendations for ‘off-the-shelf’ and industry standard software that has been used with a wide range of learners.

1.3

When using digital software to input, organise and combine information, learners could include spaces/rooms, walls, doors, windows, floors, ceilings, roofs, furniture, and other features. Where software allows, they should choose (or annotate) materials as specified in their project brief. Areas should be calculated using standardised units (m²) and rooms named. The external site can be modelled to include topography.

2.3:

Learners could compare and evaluate the use of natural and artificial lighting in their design and justify their choice of the most energy-efficient solution.

Title:		Planning permission, costing, and presenting a sustainable building project	
Unit reference number:		A/650/8388	
Level:		1	
Credit value:		5	
Guided learning hours:		20	
Learning outcomes The learner will:		Assessment criteria The learner can:	
1.	Understand issues associated with planning legislation and controls.	1.1	Describe the importance of planning and planning protocols.
		1.2	Identify planning requirements related to the design construction of the project.
		1.3	Identify common problems that arise in planning applications.
		1.4	Produce a structured argument that supports a planning application in a particular scenario.
		1.5	Outline appropriate measures to conclude a successful planning application.
2.	Understand issues associated with procurement for a construction project.	2.1	Identify the effects of local and global procurement on local and global communities.
		2.2	Identify properties of sustainable building materials.
		2.3	Identify sustainable goods and services from local sources.
		2.4	Explain the term 'bill of quantities' and how it is used in a construction project.
3.	Be able to make effective presentations.	3.1	Present the final building project using digital technology.
		3.2	Identify strengths and weaknesses in the presentation through critical feedback.

Assessment guidance:

1.2:

Learners could investigate potential planning restrictions on their construction project and outline all measures in place to ensure a positive result.

1.4:

Information that could support a planning application includes:

- Transport impact assessment
- Green travel plans
- Flood risk assessment
- Ecological assessment
- Tree report
- Site survey
- Environmental statements
- Information following public consultation
- Legal agreements.

1.5:

Learners could consider the typical information required when submitting a planning application.

2.1:

Learners could explore the sourcing of everyday purchases by investigating items on a shopping receipt (such as the local supermarket) and determine where the goods are coming from (the source), how they are manufactured/grown, by whom, and how they get to them. This exercise can then be related to the procurement of the construction materials chosen for their project.

Learners can make use of carbon footprint calculators and associated resources available online.

3.1:

The learners' presentations could:

- Be supported with digital media, for example, videos, photographs
- Prioritise key information and highlight key stages of their project
- Make appropriate use of time to deliver clear and concise points.

This presentation can be completed face to face or online using various video software.