VOCATIONAL

WJEC LEVEL 1 / 2 AWARD in

CONSTRUCTING THE BUILT ENVIRONMENT

SPECIFICATION

Teaching from 201O
For award from 20
/O6

Contents

1 INTRODUCTION

1.1 Qualification Title and Code

This specification covers the following qualifications:
601/0543/4 WJEC Level 1/2 Awards in Constructing the Built Environment

1.2 Rationale

WJEC Level 1/2 Awards in Constructing the Built Environment offer a learning experience that focuses learning for 14-19 year olds through applied learning, i.e. acquiring and applying knowledge, skills and understanding through purposeful tasks set in sector or subject contexts that have many of the characteristics of real work.

Each qualification is built from discrete units, but allows for both synoptic learning and assessment. Each unit has an applied purpose which acts as a focus for the learning in the unit. The applied purpose is the vehicle through which the learning contained in the unit is made relevant and purposeful. It is also the means by which learners are enthused, engaged and motivated to study how buildings are constructed. The applied purpose provides the opportunity for authentic work related learning, but more than this, it will require learners to consider how the use and application of their learning impacts on individuals, employers, society and the environment. The applied purpose will also enable learners to learn in such a way that they develop:

- skills required for independent learning and development;
- a range of generic and transferable skills;
- the ability to solve problems;
- the skills of project based research, development and presentation;
- the fundamental ability to work alongside other professionals, in a professional environment;
- the ability to apply learning in vocational contexts.

The qualifications have been devised around the concept of a ‘plan, do, review’ approach to learning where learners are introduced to a context for learning, review previous learning to plan activities, carry out activities and review outcomes and learning. This approach mirrors many work related activities in constructing the built environment and also provides for learning in a range of contexts thus enabling learners to apply and extend their learning. As such, the qualification provides learners with a broad appreciation of work in construction and the built environment and wider opportunities for progression into further education, employment or training.

1.3 Prior learning and Progression

There is no specific requirement for prior learning with this specification. The qualification has been designed to build on the skills, knowledge and understanding acquired at Key Stage 3, particularly skills related to literacy, numeracy, problem solving and enterprise.

WJEC Level 1/2 Awards in Constructing the Built Environment have been designed to develop in learners the skills needed for progression from Key Stage 4 and GCSE learning to further education, employment and training.

The successful completion of this qualification, together with other equivalent qualifications, such as in maths and the sciences, could provide the learner with opportunities to access a range of qualifications including GCE, apprenticeships, vocationally related and occupational qualifications. These include:

- Level 3 Extended Project;
- Level 3 qualifications in construction, such as Diplomas in Construction and the Built Environment;
- Level 2 qualifications in construction, including specialist areas such as plumbing, bricklaying and carpentry
- Apprenticeships in construction.

Equally, the skills and understanding developed, including Essential Skills (Wales), Functional Skills, Key Skills and Personal, Learning and Thinking Skills (PLTS), are relevant to any qualification at Level 3, whether 'General' or 'Vocational'.

2 QUALIFICATION STRUCTURE

WJEC Level 1/2 Awards in Constructing the Built Environment Unit Titles

WJEC Level 1/2 Awards in Constructing the Built Environment			
Unit Number	**Unit Title**	**Assessment**	**GLH**
9811	Safety and security in construction	External	30
9812	Practical construction skills	Internal	60
9813	Planning construction projects	Internal	30

3 UNIT STRUCTURE

Unit title
The unit title summarises in a concise manner the content of the unit.

Guided learning hours (GLH)
Guided learning time represents only those hours in which a tutor is present and contributing to the learning process. In some organisations this is known as 'contact time'. This time includes lecturers, supervised practical periods and supervised study time.

Aim and purpose
The aim and purpose provides a brief and clear summary of the unit. It also indicates the applied purpose for the unit.

Unit introduction
This is written to the learner and gives a summary of the unit content. It sets the vocational context of the unit and highlights the purpose of the learning in the unit.

Learning outcomes
Learning outcomes state what the learner should know, understand or be able to do as a result of completing the learning in the unit.

Assessment criteria
The assessment criteria specify the standard a learner is expected to meet to demonstrate that the learning outcomes of that unit have been achieved.

Unit content
The indicative content defines the breadth and depth of learning for each assessment criteria. It is expected that all the indicative content will be delivered during the programme of learning. It is not required to assess every aspect of the content when assessing the unit. Learners will be expected to apply the knowledge, understanding and skills acquired through the learning to the specifics of the assessment context. In some learning outcomes unit content is given as an example (e.g.). This is used to exemplify the content only and learners can use any examples that they are taught in their summative assessments.

Performance bands
These are provided in internally assessed units. These are used to determine the summative unit grade. Performance bands do **not** add additional requirements to the assessment criteria. Performance bands are used to determine the grade for a unit.

Assessment
WJEC Level 1/2 Awards in Constructing the Built Environment units are assessed through controlled internal assessment or external assessment. This section of the unit summarises assessment requirements.

Guidance for delivery
This gives the tutor some ideas on how to deliver the internally assessed units in a vocational setting consistent with the philosophy of the qualification and intent of the unit. A minimum of three sample contexts are provided for each unit. The guidance also gives ideas of vocational settings for the unit and suggests possible contacts that could be made in the delivery of the learning.

4 ASSESSMENT

WJEC Level 1/2 Awards in Constructing the Built Environment are assessed through a combination of internal and external assessment.

4.1 External assessment

Unit 1: Safety and security in construction will be externally assessed. Details of the external assessment are as follows:

- 60 minute examination;
- Total of 60 marks;
- Online assessment;
- Short and extended answer questions, based on stimulus material and applied contexts;
- Each question will have an applied problem solving scenario;
- Each paper will assess all learning outcomes. Assessment criteria will be sampled in each series;
- Available in June of each year;
- Learners are allowed one re-sit opportunity. The highest grade will contribute towards the overall grade for the qualification;
- WJEC will produce a mark scheme which will be used as the basis for marking the examination papers;
- Graded Level 1 Pass, Level 2 Pass, Level 2 Merit and Level 2 Distinction.

Grades will be awarded on the basis of the following performance descriptions. Performance descriptions are provided to give a general indication of the standards of achievement likely to have been shown by candidates awarded particular grades for external assessment. The descriptions must be interpreted in relation to the content specified in the specification; they are not designed to define that content. The grade awarded will depend in practice upon the extent to which the candidate has met these descriptors. Shortcomings in some aspects of the examination may be balanced by better performances in others.

Level 1 Pass
Learners recall, select and communicate limited knowledge and understanding of health, safety and security in construction. They analyse and evaluate limited information to apply limited understanding to health, safety and security problems. Learners present information with limited clarity.

Level 2 Pass
Learners recall, select and communicate some knowledge and understanding of health, safety and security in construction. They analyse and evaluate some information to apply some relevant understanding to solving health, safety and security problems. Learners use some effective written communication skills to present information that is mainly clear and accurate.

Level 2 Distinction
Learners recall, select and communicate detailed knowledge and thorough understanding of health, safety and security in construction. They analyse and evaluate information to apply relevant understanding to solving a range of health, safety and security problems. Learners use effective written communication skills to present information clearly and accurately.

4.2 Internal assessment

The following units are internally assessed:

- *Unit 2:Practical construction skills*
- *Unit 3: Planning construction projects*

For internal assessment, WJEC Level 1/2 Awards in Constructing the Built Environment have adopted the principles of controlled assessment as set out in the Joint Council for Qualifications document 'GCSE, GCE, ELC, Functional skills, Principal Learning in the Diploma and Project Qualifications – instructions for conducting controlled assessment'. This document can be accessed through the JCQ website (www.jcq.org.uk). Each centre must ensure that internal assessment is conducted in accordance with these controls.

The following principles apply to the assessment of each internally assessed unit:

- Units are assessed through summative controlled assessment;
- Controls for assessment of each internally assessed unit are provided in a model assignment;
- Each internally assessed unit must be assessed independently. Learners may produce a piece of evidence that contributes to assessment criteria for more than one unit. This is acceptable provided it can be clearly attributed to a specified assessment criterion and has been produced under the appropriate controlled conditions for each unit;
- Performance bands are provided for Level 1 Pass, Level 2 Pass, Level 2 Merit and Level 2 Distinction. Evidence must clearly show how the learner has met the standard for the higher grades.

There are three stages of assessment that will be controlled:

- Task setting
- Task taking
- Task marking

Task setting;

For internal assessment, WJEC has produced model assignments. Centres are, however, allowed to modify the assignment within specified parameters. This will allow centres to tailor the assessment to local needs. The model assignment has been written to ensure the following controls are in place:

- Each unit is assessed through one assignment;
- Each assignment must have a brief that sets out an applied purpose. An applied purpose is a reason for completing the tasks that would benefit society, a community, organisation or company. Further details are in the rationale in Section 1.2;
- The assignment can specify a number of tasks but tasks must be coherent, i.e. show how the assessment requirements all contribute to the achievement of the applied purpose of the assignment;
- The assignment must provide each learner with the opportunity to address all assessment criteria and all performance band requirements;
- The assignment must indicate the acceptable forms of evidence. These must conform to those forms set out in the model assignment;
- Where a centre has adapted the model assignment, there must be evidence of quality assuring its fitness for purpose. Sample documentation for this activity is provided with each model assignment.

Task taking;
There are five areas of task taking that are controlled: time, resources, supervision, collaboration and resubmission.

Time
Each model assignment will specify the total amount of time available for summative assessment. Centres have the discretion for how that time is allocated to each task.

Resources
The assessor can determine which resources should be provided to all learners to ensure fair and valid assessment takes place. Where specific resource controls must be in place, these will be stated in the model assignment.

Supervision
Learners must normally be supervised by an assessor whilst completing controlled assignment tasks. Model assignments will specify if supervision is not required. Centres must have in place systems to ensure learners cannot access evidence they have been developing outside of supervised activities.

Authentication
Supervision is in place to ensure the authenticity of evidence produced for summative assessment. Assessors are not expected to provide input or guidance to learners during the controlled assessment time. This includes providing formative feedback on the evidence being produced. Assessors can provide guidance on the requirements of the task and remind learners of the performance bands and how they can be interpreted. Assessors must intervene where there is a Health and Safety hazard observed.

Learners can review and redraft evidence independently within the time controls for the assessment.

Learners must sign a declaration to confirm that all evidence submitted for moderation is their own work and that any sources used have been acknowledged. Assessors must sign a declaration to confirm that evidence submitted for moderation was completed under the controlled conditions set out in the model assignments.

Collaboration
The model assignment will indicate whether:

- Group work must take place;
- Group work is forbidden;
- Centres can elect to complete tasks through group work.

Where group work takes place, the following principles must be applied:

- Tasks should allow each member of the group to have full access to all performance bands for all assessment criteria;
- Learners **must** provide an individual response as part of any task outcome;
- Evidence of individual response may include written evidence (e.g. notes, evaluations, mind maps, etc.) and/or audio-visual evidence (e.g. recordings, photographs, drawings, designs, etc.);
- Evidence must be clearly attributable to each individual member of the group;
- Individual contributions must be clearly identified and stated on the accompanying authentication sheet which must be signed by both the teacher and the candidate;
- Assessment of the individual must be based on the individual contribution to the evidence produced;
- Learners achievement must not be affected by the poor performance of other group members;
- Learners achievement must not benefit from the performance of other group members.

Re-sitting

Learners may re-enter internally assessed units. The learner must submit a new assessment, completed within the same levels of control. They cannot improve previously submitted work.
Learners have one resit opportunity for each assessed unit.
Where an individual learner who has previously submitted group work for assessment wishes to resit an internally assessed unit, one of the following options **must** be taken:

- The candidate must create a new piece of work within the same group;
- The candidate must create a new piece of work within a new group;
- The candidate must create a new piece of work with non-assessed candidates;
- The candidate must create an individual piece of work.

The same levels of control for group work, as outlined above, will apply to candidates who choose to re-sit.

Task marking;

All marking of evidence must be made against the assessment criteria and performance band statements given in each unit specification. Evidence marked must comply with the controlled requirements set out in the model assignment.

Written evidence must be annotated to show how it relates to the assessment criteria and performance band requirements.

Performance evidence, for example of giving a presentation, must be made on observation records. Observation records will include a description of learner performance as well as a summative statement on the quality of that performance. Where performance is observed by someone other than an assessor, the 'witness' must complete a witness statement. Assessors will need to authenticate the statement either through scrutiny of supporting evidence and/or questioning of the learner and/or witness. If the statement is authenticated, it can be allowed to contribute to the evidence for assessment. Evidence of authentication will also need to be included. Each model assignment that allows performance evidence will include a sample observation record and witness statement.

Marking should only be undertaken by a designated assessor. An assessor should have appropriate expertise in the subject and level for a specified unit. The assessor is responsible for ensuring that:

- Assessment is conducted under specified controlled conditions;
- They are clear about the requirements of the learning outcomes, assessment criteria and performance band statements prior to commencing controlled assessment;
- Evidence presented for assessment is authentic;
- Assessment decisions are accurately recorded;
- Evidence is appropriately annotated;
- Observation records contain sufficient detail for objective corroboration of decisions;
- Judgements are only made against the performance band statements.

4.3 Synoptic assessment

Synoptic assessment is
'a form of assessment which requires a candidate to demonstrate that s/he can identify and use effectively in an integrated way an appropriate selection of techniques, concepts, theories and knowledge from across the whole vocational area, which are relevant to a key task'

'Qualifications for 14 -16 year olds and Performance Tables: Technical guidance for awarding organisations' DfE p7

All units in WJEC Level 1/2 Awards in Constructing the Built Environment have been designed to require learners to develop their learning by working towards work related purposeful tasks. Learners will select and apply their learning in completion of these tasks.
In addition, *Unit 3: Planning construction projects* allows learners to reinforce their learning from units 1 and 2 in different contexts in order to propose solutions to plan construction projects.

4.4 Standardisation

Centres are expected to standardise internal assessment decisions. This is the process by which centres ensure that all learners are judged to the same standard across different assessors, teaching groups and from year to year. Evidence of standardisation should be submitted with learner evidence.

Where more than one assessor is involved, the centre must appoint a Lead Assessor. The role of the Lead Assessor is to:

- Document all activities;
- Ensure that the assignment presented to learners is fit for purpose and complies with all controls;
- Ensure all assessors have appropriate documentation in place to support fair and valid assessment decisions;
- Ensure all assessment activities are in accordance with the task taking controls for the unit;
- Sample assessment judgements at appropriate times to ensure the performance bands are correctly and consistently applied;
- Provide feedback to assessors;
- Provide support to assessors on interpretation of performance band requirements.

4.5 Training Lead Assessors

WJEC will provide training for Lead Assessors and assessors each academic year. Assessor support material, including sample documentation, will also be made available to assessors and Lead Assessors.

5 GRADING

Unit achievement is based on a learner's ability to meet the assessment criteria. Units can be awarded a summative grade of Level 1 Pass, Level 2 Pass, Level 2 Merit or Level 2 Distinction.

Awarding a summative unit grade

Internally Assessed Units
Performance bands have been written to enable learners to demonstrate their ability against the assessment criteria. There are no additional requirements to achieve higher grades.

To be awarded a **Level 1 Pass** grade for a unit, a learner must meet all of the minimum requirements of all assessment criteria for the unit, as set out in the Level 1 Pass performance band.

To be awarded a **Level 2 Pass** grade for a unit, a learner must additionally meet all of the Level 2 pass minimum requirements, as set out in the Level 2 Pass performance band.

To be awarded a **Level 2 Merit** grade for a unit, a learner must additionally meet all of the Merit minimum requirements, as set out in the Merit performance band.

To be awarded a **Level 2 Distinction** grade for a unit, a learner must additionally meet all of the minimum requirements, set out in the Distinction performance bands.

Externally Assessed Units
All learning outcomes will be assessed at every assessment opportunity. All assessment criteria will be covered within the mark allocation.

Assessment Grid

Learning Outcomes	Assessment Criteria	Marks	%
LO1 Know health and safety legal requirements for working in the construction industry	**AC1.1** Summarise responsibilities of health and safety legislation	12-18	20-30
	AC1.2 Identify safety signs used by construction industry		
	AC1.3 Identify fire extinguishers used in different situations		
	AC1.4 Describe role of the Health and Safety Executive		
LO2 Understand risks to health and safety in different situations	**AC2.1** Identify hazards to health and safety in different situations	12-18	20-30
	AC2.2 Describe potential effects of hazards in different situations		
	AC2.3 Explain the risk of harm in two different situations		
LO3 Understand how to minimise risks to health and safety	**AC3.1** Explain existing health and safety control measures in different situations	18-24	30-40
	AC3.2 Recommend health and safety control measures in different situations		
LO4 Know how risks to security are minimised in construction	**AC4.1** identify risks to security in construction in different situations	6-12	10-20
	AC4.2 describe measures used in construction to minimise risk to security		
TOTAL		**60**	**100%**

Grading the qualification

Each WJEC Level 1/2 Award in Constructing the Built Environment will be graded Level 1 Pass, Level 2 Pass, Level 2 Merit, Level 2 Distinction or Level 2 Distinction*. The qualification grade is awarded on the basis of the aggregation of unit grades achieved. Each unit grade achieved by learners will be translated to a unit mark for the purpose of awarding the qualification. Learners who achieve the minimum unit marks will be awarded a grade for the qualification.

Points available are shown in the following table:

Unit	**Points per unit**			
	Level 1	**Level 2 Pass**	**Level 2 Merit**	**Level 2 Distinction**
Unit 9811	1	2	3	4
Unit 9812	2	4	6	8
Unit 9813	1	2	3	4

The qualification grade is then calculated by comparing the learner's point score to the qualification grade table below.

Qualification	**Overall grading points**	
WJEC Level 1 Award in Constructing the Built Environment	Pass	4-6
WJEC Level 2 Award in Constructing the Built Environment	Pass	7-10
	Merit	11-13
	Distinction	14-15
	Distinction*	16

6 UNITS

Unit 1 Safety and security in construction

WJEC unit entry code 9811

Guided learning hours: 30

Aim and purpose

Construction activities take place in many different contexts. Through this unit, learners will gain the knowledge and understanding to be able to plan how to minimise risk to their own and others health and safety in different contexts.

Unit introduction

Is working in construction dangerous? Can some of the equipment and tools I use cause harm? Some of the equipment I used is expensive. How do I keep it secure? How do I make sure I am safe when working with electrical and mechanical equipment? Are there guidelines I can follow to make sure I am safe when I am carrying out tasks? Who can I rely on to keep me safe? What do I do with waste materials? Do I just put it in a skip or take it to a tip? Do I need to think about who is allowed to see designs and specifications I am given to work from? These are all important questions for anyone involved in construction.

There are many places where the construction process takes place. Bricklayers could be building a garden wall or a block work wall at the top of a new tower block. A plumber could be installing a new bathroom or fitting pipes in a petro-chemical plant. Plasterers could be working on walls that previously had asbestos and need to think about how they dispose of waste. A steel fixer could be working on a foundation or at the top of a multi-storey car-park. A roofer could be given construction drawings that contain confidential information that has to be kept secure. Trades people, inspectors, site supervisors, architects and project managers are all examples of those working in construction that could be working where construction processes take place. Some may be given commercially sensitive information such as tenders or construction designs. Some may be working in environments which have security issues such as high crime rates. Clients and members of the public may also be using and working in these environments. You will need to think about your environment, the equipment and materials you are using, and how they are being used and disposed of to make sure you keep yourself and those you are working with safe.

Knowing about possible hazards associated with construction processes is the starting point of working safely and securely. In this unit, you will learn how to look for and identify hazards to safety and security. You will learn how to measure the risk of these hazards so that you can plan ways in which you can limit the risk and work safely and securely, whatever your role or location.

Learning outcomes	**Assessment criteria**	**Content**
The learner will:	*The learner can:*	
LO1 Know health and safety legal requirements for working in the construction industry	**AC1.1** Summarise **responsibilities** of health and safety **legislation**	**Responsibilities** • Of employees • Of employers **Legislation** • Health and Safety at Work Act 1974 • Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR) • Control of Substances Hazardous to Health Regulations 2002 (COSHH) • Provision and Use of Work Equipment Regulations 1998 (PUWER) • Manual Handling Operations Regulations 1992 • Personal Protective Equipment at Work Regulations 1992 (PPER) • Working at Heights Regulations 2005 • Asbestos

	AC1.2 Identify **safety signs** used by construction industry	**Safety signs**
		• Meanings of colour coding
		• Meanings of sign shapes
		• Meanings of signs
		  ○ Naked flames prohibited
		  ○ Pedestrians prohibited
		  ○ Head protection must be worn
		  ○ Foot protection must be worn
		  ○ Risk of fire
		  ○ Risk of danger
		  ○ First aid

	AC1.3 Identify **fire extinguishers** used in different situations	**Fire extinguishers** • Water • Foam • CO_2 • Dry powder • Vaporising liquids • Wet chemical • Fire blanket
	AC1.4 Describe **role** of the Health and Safety Executive	**Role** • When in breach of legislation • Providing support and advice

Learning outcomes	**Assessment criteria**	**Content**
The learner will:	*The learner can:*	
LO2 Understand risks to health and safety in different situations	**AC2.1** Identify hazards to health and safety in different **situations**	**Situations** • On-site – substructure, superstructure • Off-site – workshop, office, travelling between sites
	AC2.2 Describe potential **effects** of hazards in different situations	**Effects** • Physical • Psychological • Financial • Environmental **Who is affected** • Self • Others working in the area • Employer • Local community • Environment • Users
	AC2.3 Explain the **risk** of harm in two different situations	**Risk** • Likelihood • Severity • How risk is measured
LO3 Understand how to minimise risks to health and safety	**AC3.1** Explain existing health and safety **control measures** in different situations	**Control measures** • Method statements • Safe systems of work • Work permits • Competent persons • PPE
	AC3.2 Recommend health and safety control measures in different **situations**	**Situations** • Locations • Changes in work practice • Equipment • Scale Individual/business responsibilities
LO4 Know how risks to security are minimised in construction	**AC4.1** Identify risks to **security** in construction in different situations	**Security** • Of tools and equipment • Personal belongings

Learning outcomes	**Assessment criteria**	**Content**
The learner will:	*The learner can:*	
		• Sensitive information
	AC4.2 Describe **measures** used in construction to minimise risk to security	**Measures** • Used by employees • Used by employers

Assessment

This unit is externally assessed. The external assessment will be available in the June of each year. The specification for the external assessment is as follows:
Duration: 1 hour
Number of marks: 60
Weightings of Learning Outcomes

	LO1	LO2	LO3	LO4
%	**20-30**	**20-30**	**30-40**	**10-20**
Marks	**12-18**	**12-18**	**18-24**	**6-12**

Grading: Level 1 Pass, Level 2 Pass, Level 2 Merit, Level 2 Distinction
Format: On screen e-assessment. Short and extended answer questions based around applied situations. Learners will be required to use stimulus material to respond to questions

Making teaching vocationally relevant
It is important that learners recognise the knowledge and understanding they develop are vocationally relevant. There are a number of ways in which this can be achieved:

- providing work experience with a workplace. This would allow learners to work with measures that are in place to minimise risks to health and safety
- arranging visits to workplaces in different locations where learners can observe practices and identify possible hazards. Discuss with company representatives how they minimise risk to health and safety
- arranging talks by visiting speakers, such as health and safety officers or health and safety inspectors
- carrying out activities based around a work-based scenario

The following are examples of approaches to delivery which could be used to enhance the learners understanding of the vocational importance of health and safety in scientific investigations.

Example 1
A representative of the Health and Safety Executive could present learners with photographs or video clips of their operation and investigations. This coupled with a joint visit of a Construction Contractor could highlight the location of key areas of potential hazards and how both parties work to the same end to create a safe working environment. The representatives could work with learners to discuss possible risks associated with each hazard and ways in which risk could be minimised looking at the legislation and practical measures undertaken to ensure compliance. Learners could produce posters, campaign literature and information leaflets related to how the identified hazards can be communicated to the workforce and risks are minimised. These could be compared with notices and information leaflets produced by the HSE and Construction Contractors.

Example 2
Representatives of a professional company could give learners simple real life risk assessments to complete on their behalf. The risk assessment could be completed on a live site with the company setting up a web-cam showing the site where the assessment will take place. Learners could work in groups to discuss possible hazards and risks, based on their observations of the site. Learners could then contribute to the completion of a risk assessment for an off-site visit. Learners could email their risk assessment to representatives of the company who could provide feedback on any hazards not identified. Learners could complete the assessment on-site and review their own risk assessments as a result of their experience.

Example 3
A local supplier/workshop (joinery, upholsterer, builders merchant) could provide learners with weekly blogs of their assessments whether manual handling, risk assessments, COSHH etc. highlighting potential hazards and risk. Learners could add comments to the blog explaining measures that could be taken to minimise risk.

Making Contacts
Examples of organisations that may be approached to provide help include:

- Contractor, Designers, Architects
- Local Authority
- HSE
- Professional Bodies (Institute of Civil Engineers, Construction Skills, Careers Providers, RIBA)
- Construction Supply Chain

Unit 2 Practical construction skills

WJEC unit entry code 9812

Guided learning hours: 60

Aim and purpose

Through this unit learners will be able to interpret technical information to plan the refurbishment of a building, taking account of health and safety issues. They will use appropriate skills and techniques to carry out the refurbishment.

Unit introduction

How do I hang a door? Can I skim plasterboard? How do you gloss a panel door? What resources do I need to build a wall? How do I plan what needs to be done? Will I be safe? How do I keep equipment secure? How do you know if what has been done is good enough?

Any renovation project will need people with different skills. A new bathroom will need plumbing, tiling, plastering and decorating. An extension needs bricklayers, carpenters and interior designers. Whatever skill is applied, selecting and using the correct tools, materials and equipment in a safe manner is critical to the process. All projects involve drawings and/or specifications which use international standard symbols and terminology which must be interpreted before they can construct a given task. From this technical information, calculations have to be made for resources before the build process takes place.

Throughout this unit you will learn to interpret technical information in order to identify materials, tools and equipment needed to complete construction tasks. You will develop a range of construction skills which can be used during construction processes, ensuring you take account of any health and safety issues.

Learning outcomes	**Assessment criteria**	**Content**
The learner will:	*The learner can:*	
LO1 Be able to interpret technical information	**AC1.1 Interpret** technical **sources of information**	**Interpret** • Symbols • Conventions • Terminology **Sources of information** • Specifications • Building regulations • Drawings • Design briefs
	AC1.2 Plan sequence of work to meet requirements of **sources of information**	**Sources of information** • Specifications • Drawings • Design briefs • Building regulations • Oral communication **Plan** • Timescales • Sequence • Health and Safety

LO2 Know preparation requirements for construction tasks	**AC2.1** Identify **resources** required to complete construction tasks	**Resources**
		• Tools
		• Equipment
		• PPE
		• Materials based on
		  ○ Characteristics
		  ○ Qualities
		  ○ Sustainability
		  ○ Limitations

	AC2.2 Calculate materials required to complete construction tasks	**Calculate** • Materials required

Learning outcomes	**Assessment criteria**	**Content**
The learner will:	*The learner can:*	
		○ Volume ○ Area ○ Perimeter ○ Time ○ Ratio • Costs
	AC2.3 Set **success criteria** for completion of construction tasks	**Success criteria** • Level of tolerance • Timescales • Quality
	AC2.4 Prepare for construction tasks	**Prepare** **Centres should teach the content relevant to the techniques selected from AC 3.1** • Checking materials for defects • Organising materials • Measuring materials • Marking out materials • Cutting materials • Setting out materials • Dry bond materials • Mix mortar materials

Learning outcomes	**Assessment criteria**	**Content**
The learner will:	*The learner can:*	
LO3 Be able to use construction processes in completion of construction tasks	**AC3.1** Apply **techniques** in completion of construction tasks	**Learners should be taught skills related to a minimum of three of the following techniques. The content provides examples of skills for each technique that could be taught. Skills should relate to refurbishment of a property.** • Textiles e.g. pelmets, curtains, wall coverings • Wood e.g. hang a door, make a frame, attach a skirting-board, create a timber stud wall • Brick e.g. use wall connectors, cut bricks, create wall no higher than a metre, stretcher bond • Plaster e.g. apply plasterboard, skim • Decorate e.g. emulsion a surface, gloss a panel door, paper an internal corner or around a switch • Tiling e.g. floor and wall, patch repair • Electrical e.g. lighting, add a new socket • Plumbing e.g. waste and taps to a sink • Heritage skills e.g. dry stone wall, roofing (change material or patch) **These techniques should be taught in relation to the techniques selected from above** • Removal and safe disposal of materials • Awareness and application of Health and Safety practices
	AC3.2 Apply **health and safety** practices in completion of construction tasks	**Health and Safety** • Cleanliness and safety of work area • Safe working practices • Use of correct PPE
	AC3.3 Evaluate quality of construction tasks	**Evaluate** • Self-evaluation • Against specified tolerances • Against success criteria

		Performance bands			
Learning Outcome	**Assessment criteria**	**Level 1 Pass**	**Level 2 Pass**	**Level 2 Merit**	**Level 2 Distinction**
LO1 Be able to interpret technical information	**AC1.1 Interpret** technical **sources of information**	Interpret a limited range of technical information. Evidence tends to focus on one type of source	Interpret a range of technical information from more than one type of source. There may be some inaccuracies or omissions	Accurately interpret a range of technical information from more than one type of source. There may be some omissions	Accurately interpret required technical information from more than one type of source
	AC1.2 Plan sequence of work to meet requirements of **sources of information**	Plans in outline sequence of work. There may be issues with sequence proposed	Plan sequence of work to meet requirements. Process is mainly logical, showing knowledge of processes to be followed. Timescales are mainly appropriate		
LO2 Know preparation requirements for construction tasks	**AC2.1** Identify **resources** required to complete construction tasks	Identifies key resources required to complete construction task	Identifies resources required to complete construction tasks. There may be some omissions or lack of detail	Accurately identifies and specifies in detail resources required to complete construction tasks	
	AC2.2 Calculate materials required to complete construction tasks	Calculates materials required to complete construction tasks. Totals calculated may have some errors although process used correct. There may be omissions in use of standard conventions and some materials required	Calculates materials required to complete construction tasks. There may be some errors in totals, degree of accuracy recorded or standard conventions used. Processes followed to complete calculations is correct	Calculates to an appropriate degree of accuracy materials required to complete construction tasks. There may be some errors in totals or standard conventions used, but these have limited effect on overall requirements. Processes followed to complete calculations is correct	Calculates accurately materials required to complete set tasks using standard conventions
	AC2.3 Set **success criteria** for completion of construction tasks	Success criteria specified in the brief are stated	Success criteria for completion of construction tasks are identified from explicit and implicit information provided in the brief		

		Performance bands			
Learning Outcome	**Assessment criteria**	**Level 1 Pass**	**Level 2 Pass**	**Level 2 Merit**	**Level 2 Distinction**
	AC2.4 Prepare for construction tasks	A limited range of preparation tasks are completed effectively. The learner required direction and guidance to carry out tasks	A range of preparation tasks are completed effectively in a mainly logical sequence. There may be some errors and omissions. Tasks are completed with limited guidance and direction	A range of appropriate preparation tasks are completed effectively in a logical sequence. Tasks are completed independently	
LO3 Be able to use construction processes in completion of construction tasks	**AC3.1** Apply **techniques** in completion of construction tasks	Techniques are used effectively in completion of a limited range of tasks. Outcomes of tasks are within acceptable levels of tolerance as a result of guidance and interventions	A range of techniques are used effectively in completion of most specified tasks. Outcomes are within acceptable tolerances, achieved with limited guidance or intervention	A range of techniques are used effectively in completion of specified tasks. Outcomes are mainly within specification tolerances and all within acceptable tolerances. Outcomes are achieved with limited guidance.	A range of techniques are used effectively in completion of specified tasks. Outcomes are within specification tolerances and achieved independently
	AC3.2 Apply **health and safety** practices in completion of construction tasks	Applies health and safety practices under direction	Applies health and safety practices in completion of construction tasks. Some guidance and intervention may be required		
	AC3.3 Evaluate quality of construction task	Identifies where construction tasks meet requirements	Evaluates quality of construction tasks. Judgements show some reasoning and consideration is given to both specification and success criteria, but lacks balance	Evaluates quality of construction tasks. Judgements are reasoned and equal consideration given to specification and success criteria	

Assessment

Requirements for centres
This unit is internally assessed and externally moderated. All assessment must be conducted under controlled assessment conditions and controls have been determined for each stage of the assessment process: task setting, task taking and task marking.

Task setting:
To assist centres in the assessment of this unit, WJEC has provided a model assignment along with guidance and criteria related to its use. The model assignment consists of tasks that are applied and holistic in their approach. The model assignment will require learners to demonstrate their skills in three of the techniques specified in the unit content. Model assignments are designed so that they can be used as they are or adapted by centres to fit with the local sector needs and allow the usage of local resources available to the centre. The model assignment includes information on which aspects of the assignment can be adapted. The model assignment will, therefore, set out a scenario that requires the use of three techniques but will allow centres to adapt the scenario to reflect the techniques that have been taught.

Task taking:
Under the process of task taking, controls are set for the key aspects of time, resources, supervision and collaboration.

- The time taken will be specified within the model assignment.
- Resources must be provided that give learners fair and full access to the marking criteria and are appropriate for the assessment and requirements of the unit. Details of specific controls will be given within the model assessment.
- Information on where direct supervision is required is provided in the model assignment.
- Guidance on collaboration, and where it is permitted, will be given with the model assignment.

Within WJEC model assignments, timing may be suggested for some individual tasks within the overall assessment time. The purpose is to give consortia additional guidance to help to manage the assessment task.

Task marking:
The centre must mark learner's assessment evidence against the performance bands for each assessment criteria. The performance bands describe the depth which the assessment criterion has been achieved by the learner. The model assignment brief will include a specification that incorporates the tolerances allowed in completion of the tasks. The model assignment will also provide guidance to centres on the level of tolerance that is required to meet the marking bands for the specific techniques and skills assessed. As this will vary according to the techniques and skills assessed, the model assignment will also provide guidance on how centres can set acceptable levels of tolerance within any adapted assignment.

Guidance for Delivery

Making teaching vocationally relevant
It is important that learners recognise the knowledge and understanding they develop are vocationally relevant. There are a number of ways in which this can be achieved:

Master classes from apprentices working with local employers would allow learners to work with young people, able to share their experiences of working in construction as well as develop skills from those employed within the sector and alerting them to the potential of apprenticeships as a career option
Working on projects set by industry partners, using technical information that they use on-site. This could include completing requisition orders or similar documentation
Visits to local builders merchants to inspect different types of materials, selecting the appropriate materials to meet technical requirements. This will allow learners to see and touch materials that may be expensive or fragile to work with in a learning environment.

The following are examples of approaches to delivery which could be used for learners to interpret technical information to plan the refurbishment of a building, taking account of health and safety issues and using appropriate skills and techniques to carry out the refurbishment.

Example 1
A local community centre needs a new disabled ramp constructed, the old wooden one has rotted and become unsafe. A wall has to be built strong enough to be used as shuttering for hardcore and then a concrete surface over it. Also it needs to be strong enough to have a hand rail fixed to it. Learners are provided with technical information in the form of drawings. They are required to identify and calculate resource requirements, working in groups to plan the process. A representative of the community centre negotiates with them the success criteria to be used for evaluation on completion. Learners identify what materials will be needed for the construction and contact local builders merchants and local hire firms to sponsor the materials, tools and equipment. This approach will develop in learners communication and negotiation skills and also introduce them to a number of potential future employers. Learners complete the project and discuss the result with the representative of the community centre.

Example 2
A local infant's school has recently had a new storage facility built for toys, bikes etc. A local architect firm designed the new building and has made available copies of the technical information that was provided to the contractors. Learners interpret the information provided to identify materials required and success criteria to be used. Learners then visit the school to carry out an inspection, once the construction is complete, making judgements against the success criteria that they set. This develops their own evaluation skills and as well as their ability to interpret technical information. It will also provide learners with interaction with potential construction employers. This activity provides the possibility for learners to work with other trades to complete this task.

Example 3
A hospice would like a brick built BBQ in its grounds for fund-raising events. The materials used must be sustainable and in keeping with the existing structures. New bricks would not fit in with the surroundings so reclaimed bricks and lime mortar will need to be sourced. Learners plan and calculate what would be required to complete the task and visit local reclamation yards to search for materials. They design and build the construction.

Making Contacts
Examples of organisations that may be approached to provide help include:

- Builders merchants
- Architects
- Hire company
- Reclamation yards

Unit 3 Planning construction projects

WJEC unit entry code 9813

Guided learning hours: 30

Aim and purpose

Through this synoptic unit, learners will use learning from the development of practical skills and health and safety requirements of construction processes and gain the knowledge and understanding needed to plan straightforward built environment development projects.

Unit introduction

Who does what when refurbishing a property, building a new construction or improving a built environment? How long does a building development take? Is there a need for a project manager? Who is a project manager? What can stop a construction project from being successful?

Construction projects can vary from a small refurbishment of a bathroom to the development of a new town or motorway. All projects need to be planned. Some projects will need a Project Manager with several staff involved in planning and monitoring over months or years. Smaller scale projects, like refurbishments, might only involve one or two people throughout. The processes they follow are the same. Whether working for a large construction company or a self-employed trade's person, knowledge of project management and the skills that go with it are essential to make construction projects a success.

Through this unit you will learn about different types of jobs that exist in the construction sector and how these jobs contribute to successful projects. You will develop an understanding of the processes that are followed by people working in construction that ensure projects are successful. You will use the knowledge and understanding you have acquired through carrying out practical construction tasks and consideration of safety and security of construction processes, together with planning skills developed through this unit, so that you can plan construction projects.

Learning outcomes	**Assessment criteria**	**Content**
The learner will:	*The learner can:*	
LO1 Know job roles involved in realising construction and built environment projects	**AC1.1** Describe activities of **those involved** in **construction projects** **AC1.2** Describe responsibilities of **those involved** in **construction projects** **AC1.3** Describe outputs of **those involved** in realising **construction projects**	**Those involved** • Client's team (client, architect, engineer, quantity surveyor, project manager, designer) • Contractor's team (builder/site engineer, site supervisor, safety officer, tradespersons, specialist sub-contractors) • Statutory personnel (building inspector, town planner, public health inspector) • General (administrator, finance officer, public liaison officer, purchasing/procurement officer, catering, security) **Construction projects** • Refurbishments • Extensions
LO2 Understand how built environment development projects are realised	**AC2.1** Describe **processes** used in built environment development projects	**Processes** • Planning (design, project planning, procurement) • Construction (secure site, site clearance, substructure, super-structure) • Handover to client (commissioning, handover) • Maintenance
	AC2.2 Calculate resources to meet requirements for built environment development projects	**Calculate** • Area • Volume • Percentages • Scaling • Best value • Tolerances • VAT • Tender price **Resources** • Plant • Labour • Materials
	AC2.3 Assess potential effect of **factors** on project success	**Factors** • Internal e.g. lack of qualified and certified key personnel, sourcing of

Learning outcomes	**Assessment criteria**	**Content**
The learner will:	*The learner can:*	
		finance, security • External e.g. penalty clauses, weather conditions
	AC2.4 Interpret **sources of information**	**Sources of information** • Drawings • Catalogues • Spreadsheets • Suppliers material lists • Specifications
LO3 Be able to plan built environment development projects	**AC3.1** Sequence **processes** to be followed	**Processes** • Planning • Construction • Handover
	AC3.2 Apportion time to **processes**	
	AC3.3 Use **project planning tools**	**Project planning tools** • Project • Gantt charts • Spreadsheets
	AC3.4 Set **project tolerances**	**Project tolerances** • Time • Cost

		Performance bands			
Learning Outcome	**Assessment criteria**	**Level 1 Pass**	**Level 2 Pass**	**Level 2 Merit**	**Level 2 Distinction**
LO1 Know job roles involved in realising construction projects	**AC1.1** Describe activities of **those involved** in **construction** projects	Outlines in general terms activities of those involved in construction projects	Describes activities of those involved in a specific construction project, most of which is relevant	Describes in detail the activities of those involved in a specific construction project, most of which is relevant	Describes in detail the activities of those involved in a specific construction project
	AC1.2 Describe responsibilities of **those involved** in **construction projects**	Outlines in general terms responsibilities of those involved in construction projects	Describes responsibilities of those involved in a specific construction project, most of which is relevant		
	AC1.3 Describe outputs of **those involved** in **construction projects**	Outlines in general terms how the outputs of those involved in construction projects	Describes outputs of those involved in a specific construction project	Describes in detail outputs of those involved in a specific construction project	
LO2 Understand how built environment development projects are realised	**AC2.1** Describe **processes** used in built environment development projects	Outlines in general terms the processes used in built environment development projects	Describes processes used in a specific built environment development project, most of which is relevant		
	AC2.2 Calculate resources to meet requirements for built environment development projects	Calculations show that there has been some consideration for meeting project requirements. Some results of calculations are accurate	Calculations take account of resources to meet requirements for built environment development projects. There may be some minor omissions. Results of calculations are mainly accurate	Calculations take account of resources to meet requirements for built environment development projects. Results of calculations are mainly accurate	
	AC2.3 Assess potential effect of **factors** on project success	Outlines in general terms, with limited reasoning, potential effect of factors on project success	Assesses potential effects of factors on project success. A limited range of factors are considered against identified success criteria. Evidence has some reasoning and some content is appropriate to a specified project	Assesses potential effects of a range of factors on project success. Most evidence is well reasoned and relevant to a specified project success criteria	Assesses with clear and detailed reasoning potential effects of a range of factors on specified project success criteria

		Performance bands			
Learning Outcome	**Assessment criteria**	**Level 1 Pass**	**Level 2 Pass**	**Level 2 Merit**	**Level 2 Distinction**
	AC2.4 Interpret **sources of information**	Extracts a limited range of relevant information from a limited range of information sources	Extracts mainly relevant information from a range of information sources		
LO3 Be able to plan built environment development projects	**AC3.1** Sequence processes to be followed	A range of processes are sequenced. There may be significant omissions or errors	A range of appropriate processes are sequenced. There may be some minor errors or omissions	A range of appropriate processes are sequenced in logical order	
	AC3.2 Apportion time **to processes**	Time is apportioned within acceptable tolerances to most processes	Time is apportioned accurately to most processes		
	AC3.3 Use project **planning tools**	Uses appropriate project planning tools with guidance, to effectively show project plan	Uses appropriate project planning tools effectively to show project plan. There may be some errors in the use of software. Project planning tools used with some direction or intervention	Uses appropriate project planning tools effectively to show clearly project plan. Project planning tools used with limited direction or intervention	Independently uses appropriate project planning tools effectively to show clearly and in detail project plan
	AC3.4 Set **project tolerances**	Tolerances are set to most processes. There may be some that are inappropriate.	Appropriate tolerances are set to most processes		

Assessment

Requirements for centres

This unit is internally assessed and externally moderated. All assessment must be conducted under controlled assessment conditions and controls have been determined for each stage of the assessment process: task setting, task taking and task marking.

Task setting:
To assist centres in the assessment of this unit, WJEC has provided a model assignment along with guidance and criteria related to its use. The model assignment consists of tasks that are applied and holistic in their approach. Model assignments are designed so that they can be used as they are or adapted by centres to fit with the local sector needs and allow the usage of local resources available to the centre. The model assignment includes information on which aspects of the assignment can be adapted.

Task taking:
Under the process of task taking, controls are set for the key aspects of time, resources, supervision and collaboration.

- The time taken will be specified within the model assignment.
- Resources must be provided that give learners fair and full access to the marking criteria and are appropriate for the assessment and requirements of the unit. Details of specific controls will be given within the model assessment.
- Information on where direct supervision is required is provided in the model assignment.
- Guidance on collaboration, and where it is permitted, will be given with the model assignment.

Within WJEC model assignments, timing may be suggested for some individual tasks within the overall assessment time. The purpose is to give consortia additional guidance to help to manage the assessment task.

Task marking:
The centre must mark learner's assessment evidence against the performance bands for each assessment criteria. The performance bands describe the depth which the assessment criterion has been achieved by the learner.

Guidance for Delivery

Making teaching vocationally relevant

It is important that learners recognise the knowledge and understanding they develop are vocationally relevant. There are a number of ways in which this can be achieved:

- Working on projects set by industry partners, using technical information that they use on-site. This could include completing requisition orders or similar documentation
- Visits to local builders merchants to inspect different types of materials, selecting the appropriate materials to meet technical requirements. This will allow learners to see and touch materials that may be expensive or fragile to work with in a learning environment
- Masterclasses from those involved in project management on the use of project management software, developing project plans for realistic and credible construction project.

The following are examples of approaches to delivery which could be used to enhance the learners understanding of the bricklaying process and its different uses.

Example 1
Learners work with a construction company involved in a community renovation project. Learners are provided with sufficient information to draw up an initial plan. Learners are then provided with information showing actual activities and they use this to identify factors that affected the plan and actions that were taken to respond to these factors.

Example 2
An architect presents learners with design information on a small new build project. Learners use information from potential suppliers to identify sources of materials and potential costs. Learners plan timescale for use of the resources and present a cash flow forecast for the project. The architect provides learners with feedback, including their expectations of costs and budget.

Example 3
Learners are presented with information from a potential client on plans to extend a business property. Learners identify the processes and personnel needed to complete the project and produce a plan of activities. Learners present their plans to client representatives, including details of potential factors that could affect success.

Making Contacts
Examples of organisations that may be approached to provide help include:

- Builders merchants
- Architects
- Hire company
- Reclamation yards

7 ENTRY PROCEDURES

WJEC Level 1/2 Qualifications in Constructing the Built Environment will be available for certification from June 2015.

Thereafter, each qualification will be available for certification each June.

Entries for the June series must be submitted no later than 21 February.

Unit entry

Entry for individual units must be made by submitting the relevant unit codes as indicated on each unit of the specification.

The externally assessed unit will require centres to complete the following prior to and during the examination:

1. Install SecureAssess software.
2. Run checks to ensure software is functioning as expected.
3. A keycode unique to the candidate is used to access the examination. These can be printed off 3 to 5 days prior to the examination and stored securely.
4. For candidates requiring extra time, this can only be added after the examination window opens and before the candidate enters their keycode. You will be informed of the examination window by WJEC.
5. With the examination room prepared, candidates enter their keycodes.
6. The invigilator can activate, pause and resume the examination.
7. Candidates finish the examination.
8. The centre must contact WJEC to ensure all on-screen scripts have been received.

Full details of WJEC e-assessment procedures are available on the subject website.

Qualification entry

Learners will be entered for the qualification when entering for aggregation (cash-in). Aggregation does not take place automatically: it is necessary to enter the relevant code for aggregation to take place.

8 EXTERNAL MODERATION

The consistency of assessment practices and decisions across centres will be assured through the external moderation of a sample of work.
Postal moderation will take place each year in June. For each series where learners are entered, centres will submit a sample, according to the formula below.

Total number of candidates	*Work to be submitted (Numbers relate to rank order)*
1 – 10	All
11 - 19	1st and every second (1, 3, 5, 7 etc.) **plus** the lowest scoring folder and additional folders as necessary (reflecting the spread of marks) to make a total sample of 10
20 - 45	1st and every fifth (1, 6, 11, 16 etc.) **plus** the lowest scoring folder and additional folders as necessary (reflecting a spread of marks) to make a total sample of 10
46 - 99	1st and every eleventh (1, 12, 23, 34 etc.) **plus** the lowest scoring* folder and additional folders as necessary (reflecting a spread of marks) to make a total sample of 10

** The score is based upon the total points the learners obtain for their units before converting to a qualification grade.*

Centres should ensure they keep all learner work not sent to the moderator in their possession for two months after the closing date for sending samples for moderation. WJEC may require all work for moderation and centres must be able to comply immediately with such a request.

Centres should submit a sample for **each unit** that includes:

- The controlled assignment brief used to set the assessment activity;
- A controlled assessment activities sheet completed and signed by the assessor to confirm that the controls for the unit, including authenticity of evidence, have been applied;
- Completed mark record sheets outlining which performance bands are met by the evidence;
- All evidence produced by learners in completion of the controlled assessment, annotated appropriately by the assessor.

Moderators will review all evidence presented to ensure standards are aligned. Evidence will be judged against the following criteria:

- Task setting – were tasks set within the controls set by WJEC in the model assignment?
- Task taking – is there evidence that tasks were completed under the controlled conditions set out in the model assignment?
- Performance bands – does the evidence support assessor's judgement of a learner against national standards?
- Annotation – is the evidence produced by learners appropriately annotated?
- Authentication- is it clear that the evidence submitted was authentically produced by the learner?
- Standardisation – is there evidence of effective standardisation/internal quality assurance within the centre?

Timetable

Samples of work must be submitted for external moderation, and related mark sheets returned to WJEC by 5 May for the June series. Centres will need to ensure that internal submission dates are set sufficiently in advance of this to allow for authentication, assessment and standardisation.

Feedback

The outcome of moderation will be to either accept or amend a centre's assessment decisions. Guidance on actions needed before re-sitting of specified units at a subsequent moderation series will also be provided.
Feedback will be provided through a centre moderator's report for each certification title, covering the units entered by the centre and will be accessible through WJEC secure website. The report will address the criteria referred to above.
A Principal Moderator's report will be provided for each series.

9 AWARDING AND REPORTING

Awarding and reporting of results in WJEC Level 1/2 Qualifications in Constructing the Built Environment will take place in August of each year.

A **Qualification Certificate,** issued at a later date, will confirm the

- Title
- Level
- Grade of qualification (Level 1 Pass, Level 2 Pass, Level 2 Merit, Level 2 Distinction, Level 2 Distinction*)
- Unit titles contributing to the qualification

10 ACCESS AND SPECIAL CONSIDERATION

Qualifications at this level often require assessment of a broad range of competencies. This is because they are general qualifications and, as such, prepare candidates for a wide range of occupations and higher level courses.

This specification has been designed to offer fair access for all and to minimise the need to make reasonable adjustments for learners who have particular requirements. It has been reviewed to identify whether any of the competences required by the subject pose a potential barrier to any of the nine protected characteristics covered by the Equality Act 2010. None were identified.

It is expected that normally, individual learners' abilities, interests and needs will be appropriately catered for by centres through:

(a) the choice of units and qualifications available, and
(b) the potential for personalisation of controlled assessment.

If there are any queries about the use of this flexibility inherent in the specification to meet learners' needs, or about the use of reasonable adjustments, centres should contact WJEC.

Reasonable adjustments are made for disabled candidates in order to enable them to access the assessments e.g. candidates are allowed access to a Sign Language Interpreter, using British Sign Language or Irish Sign Language. For this reason, very few candidates will have a complete barrier to any part of the assessment. Information on reasonable adjustments is found in the Joint Council for Qualifications document *Regulations and Guidance Relating to Candidates who are eligible for Adjustments in Examinations.* This document is available on the JCQ website (www.jcq.org.uk).

11 POST RESULTS SERVICE

If a centre wishes to query the outcome of the moderation and/or examination process this must be done formally by the head of the centre, notifying WJEC within 21 days of the publication of results.

The sample of work submitted for moderation will be reviewed by a moderator/examiner not involved in the original process, and the centre informed of the outcome.

Should the centre not be satisfied with the outcome of the review, there is provision for an appeal to WJEC.

12 CLASSIFICATION CODES

Every specification is assigned a national classification code indicating the subject area to which it belongs. The classification code for this specification is TA. Centres should be aware that candidates who enter for more than one qualification with the same classification code will have only one grade (the highest) counted for the purpose of the School and College Performance Tables.

Centres may wish to advise candidates that, if they take two specifications with the same classification code, schools and colleges are very likely to take the view that they have achieved only one of the two qualifications. The same view may be taken if candidates take two specifications that have different classification codes but have significant overlap of content. Candidates who have any doubts about their subject combinations should check with the institution to which they wish to progress before embarking on their programmes.

13 THE WIDER CURRICULUM

Opportunities for use of technology
Learners are expected to make effective use of ICT in ways that are appropriate to these qualifications. Opportunities will arise during normal classroom activities as follows:

- use the Internet for sources of secondary evidence;
- using word-processing software to produce documentation such as order forms and risk assessments;
- using spreadsheets to calculate resource requirements;
- using project planning software;
- using multi-media software to present information.

Spiritual, Moral, Ethical, Social and Cultural Issues
Developing outcomes that have applications to individuals, societies and businesses require learners to consider the points of view of others, including employers, employees, communities and customer, in both written and spoken forms, presented in a variety of ways.
Learners will have opportunities to develop critical and analytical skills in their study of safety and security issues associated with construction projects and planning processes and resources involved in construction projects. They will also have opportunities to reflect on their reading, their own wider experience, and the experience of others, in both written and oral form. In classroom discussion and writing, they will be required to reflect on a range of spiritual, moral, ethical, social, and cultural issues when discussing safety and security and planning construction projects.

Citizenship
The applications and implications of constructing the built environment in society, which are inherent in this specification, encourage the development of a responsible attitude to citizenship. An understanding that individuals have a collective responsibility is fostered in relation to various ethical issues included in the specification.

The specification gives learners opportunities to develop the skills of critical and analytical reading and listening. It also allows them to both express and develop their point of view in writing and speaking, whilst encouraging them to consider critically and constructively the views of others. This ability to make informed and considered judgements is a skill vital in the development of individual citizenship. This specification also underpins the development of a range of skills which are of vital importance to individuals in the wider world.

Environmental Issues
This specification affords candidates the opportunity to read about, write about, and discuss environmental issues associated with planning construction projects, associated processes and resources. Whether considering local environments, waste disposal or sustainability there are opportunities to develop an awareness of environmental issues and controversies.

Health and Safety Consideration
At all times both teachers and candidates should be aware of Health and Safety issues arising from work both within and outside the centre. Risk assessments are required for all practical work whether it takes place in a workshop or construction site. The specifications require candidates to develop the relevant skills and awareness of Health and Safety issues, particularly as applied to constructing the built environment.

The European Dimension
The approach used in constructing the specification lends itself to the establishment of links with other areas of study. It may also be used to illustrate the European dimension and requires consideration of the issues posed by different perspectives.

Appendix 1 Mapping of Skills

Personal, Learning and Thinking Skills (PLTS)

PLTS	*Unit 1*	*Unit 2*	*Unit 3*
Independent enquirers	✓	✓	✓
Creative thinkers	✓	✓	✓
Reflective learners	✓	✓	✓
Team workers	✓	✓	✓
Self managers	✓	✓	✓
Effective participators	✓	✓	✓

KEY SKILLS AND ESSENTIAL SKILLS (WALES)

Application of Number

	Unit 1	*Unit 2*	*Unit 3*
Understand numerical data		✓	✓
Carry out calculations		✓	✓
Interpret results and present findings		✓	✓

Communication

	Unit 1	*Unit 2*	*Unit 3*
Speaking and listening	✓	✓	✓
Reading	✓	✓	✓
Writing	✓	✓	✓

ICT

	Unit 1	***Unit 2***	***Unit 3***
Use ICT systems	✓	✓	✓
Find, select and exchange information, using ICT	✓	✓	✓
Develop and present information, using ICT	✓	✓	✓

Improving own Learning and Performance

	Unit 1	***Unit 2***	***Unit 3***
Set targets using information from appropriate people and plan how these will be met	✓	✓	✓
Take responsibility for your learning, using your plan to help meet targets and improve your performance	✓	✓	✓
Review progress and establish evidence of your achievements	✓	✓	✓

Problem Solving

	Unit 1	***Unit 2***	***Unit 3***
Explore a problem and identify ways of tackling it	✓	✓	✓
Plan and implement at least one way of solving the problem	✓	✓	✓
Check if the problem has been solved and review your approach to problem solving	✓	✓	✓

Working with Others

	Unit 1	***Unit 2***	***Unit 3***
Plan work with others	✓	✓	✓
Seek to develop co-operation and check progress towards your agreed objectives	✓	✓	✓
Review work with others and agree ways of improving collaborative work in the future	✓	✓	✓

Appendix 2 Mapping to Construction and Built Environment Curriculum Content[1]

Learning outcomes	**Planning construction projects**	**Practical construction skills**	**Safety and security in construction**
Theme: Create the built environment			
2.9 Examine main job roles and their relationship to each other within the built environment and explore typical career pathways, qualifications and progression			
2.10 Identify and use a range of technical information used in the construction of the built environment			
2.11 Investigate a range of methods and techniques used in the construction of ground works, substructures, superstructures and external works			
2.12 Identify a range of hazards and risks commonly encountered in the construction of the built environment			
2.13 Identify and apply good practice in safe working techniques			
2.14 Select and use a range of tools, materials and personal protective equipment to perform construction activities			

[1] Construction and Built Environment Curriculum Content taken from Construction and the Built Environment: How University Technical Colleges can deliver best practice. Published by The Baker Dearing Trust and supported by University Technical Colleges, CITB Construction Skills and the Edge Foundation.

Appendix 3 Glossary

A 3.1 Knowledge learning outcomes

Knowledge learning outcomes are effectively assessed through the learner giving the 'facts' of a situation.

Differentiators

Differentiators in performance are often given using the following terms:

Accuracy

Is what they are claiming as fact actually correct?

Breadth/range

Is there an expectation of breadth rather than depth i.e. they should have superficial knowledge of a lot of facts rather than in-depth knowledge of a few?

Clarity

This is often related to communication skills, but you can anticipate that someone who really knows something, knows how to organise what they are saying and doesn't mix it with information that is incorrect or irrelevant. People who waffle tend to be less certain of their knowledge than those who can be succinct and to the point.

Depth/detail

Have they given sufficient detail to confirm that they really do know something?

Relevance/application

Do the facts have to be relevant to the situation? Is it simply pure theory or do you want them to show knowledge through their discarding of what they consider is not relevant?

Command Verbs

A consideration of the command verbs used in the assessment criteria, can help determine which differentiators could be used. Below are definitions of knowledge related command verbs.

Describe – paint a picture in words, provide information with detail. Using this analogy, you would expect there to be some detail in what they know. Describe could be extended to merit and/or distinction, but could also be pass only. If it is to be extended to distinction, then there will probably need to be a number of qualifiers.

Define – state the meaning of a term. It is unlikely this could be extended to merit or distinction level.

Identify – recognise, distinguish and establish what something is. It is unlikely that this could be extended to distinction level. Differentiation is likely to be about relevance and accuracy.

Illustrate – exemplify, describe with reference to examples. This could be extended to merit and distinction level.

Outline – a general, preliminary, or rough plan or account of something that concentrates on the main features and ignores detail, e.g. a list of the main points covered or to be covered in a speech. This is unlikely to be extended to merit and distinction level. A good outline becomes a description!

State – make an assertion. This would not extend beyond pass.

Summarise- to give a shortened version of something that has been said or written, stating its main points.

A 3.2 Understand learning outcomes

Understanding learning outcomes are effectively assessed through the learner showing how they have applied their knowledge through effective reasoning.

Differentiators

Clarity Is the reasoning explicit or implicit. Where reasoning is implicit the level of understanding has to be interpreted. Explicit reasoning shows the understanding clearly exists.

Depth How detailed is the reasoning?

Justification Are you persuaded of their argument and reasoning?

Substantiation Has the learner drawn on evidence to support any conclusions made?

Validity Is the reasoning valid? Is it accurate? Is it based on the context of the situation? Is it based on theory?

Command Verbs

Below are definitions of understanding related command verbs.

Analyse – examine in detail, break into component parts, examine relationships

Assess – make a judgement about the quality or value of something

Compare – explain similarities and differences

Evaluate – make judgements against criteria, usually based on analysis and data
Explain – give reasons

Justify – persuade someone of the validity of an argument, to validate a proposal

A 3.3 Be able to learning outcomes

'Be able to' learning outcomes focus on learner's development of skills. They involve practical, hands on activities. Related AC's are often assessed through the production of ephemeral evidence, such as witness testimonies and observation records.

Differentiators

Accuracy

Were they able to elicit accurate information by using the skills?

Adaptation

Can they use the skill in different contexts?

Appropriate

Was the skill used appropriately, taking account of the situation/location?

Confidence

Very difficult to assess as it is an intrinsic feeling so assessors will find this challenging to determine. It is sometimes used, however. Consider hesitance as a sign of a lack of confidence, so fluidity and consistency can be aspects of confidence.

Effectiveness

Did the use of the skill produce the expected outcomes?

Independence

Were the learners able to demonstrate the skill without support or guidance from others?

Command Verbs

Below are definitions of 'be able to' related command verbs.

Collaborate – make a contribution to the work of a team, supporting team members as required

Communicate – ensure information is received effectively

Display – organise and present information diagrammatically

Handle – manipulate a tool/equipment to a desired effect

Monitor – observe and record activity, could also include ensuring expected progress is maintained

Maintain – to keep in an appropriate condition

Plan – organise a range of components into a logical sequence. This could also include timings. It could also include how this organisation is presented

Present – organise and communicate in a way that can be clearly followed and understood. Often refers to oral communication skills and may include use of supporting information

Process – use a series of actions to elicit results

Record – obtain and store data and information

Use – employ something for a purpose