

SPECIFICATION

First teaching: September 2017 | First certification: Summer 2018

ISSUE 5



Pearson BTEC Level 2 Technical Diploma in Design Production

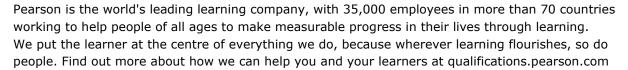
Specification

First teaching September 2017 Issue 5

Edexcel, BTEC and LCCI qualifications

Edexcel, BTEC and LCCI qualifications are awarded by Pearson, the UK's largest awarding body offering academic and vocational qualifications that are globally recognised and benchmarked. For further information, please visit our qualifications website at qualifications.pearson.com. Alternatively, you can get in touch with us using the details on our contact us page at qualifications.pearson.com/contactus

About Pearson



This specification is Issue 5. Key changes are listed in the summary table on the page after next of the document. We will inform centres of any changes to this issue. The latest issue can be found on the Pearson website: qualifications.pearson.com

References to third-party material made in this specification are made in good faith. We do not endorse, approve or accept responsibility for the content of materials, which may be subject to change, or any opinions expressed therein. (Material may include textbooks, journals, magazines and other publications and websites.)

ISBN 978 1 446 95492 8

All the material in this publication is copyright

© Pearson Education Limited 2021

Welcome

With a track record built over 30 years of learner success, BTEC qualifications are widely recognised and respected. They provide progression to the workplace, either directly or via study at higher levels. Proof comes from YouGov research, which shows that 62% of large companies have recruited employees with BTEC qualifications.

Why are BTECs so successful?

BTECs embody a fundamentally learner-centred approach to the curriculum, with a flexible, unit-based structure. In these new BTEC Level 2 Technicals, the focus is on the development of technical, practical and transferable work-related skills, and sector-specific knowledge. The development of these skills is key for learners to progress to work or to an Apprenticeship.

When creating the BTEC Level 2 Technicals, we worked with employers to ensure that the qualifications meet their needs. Employers are looking for recruits with the appropriate technical knowledge, and technical and transferable skills essential for employment.

The BTEC Level 2 Technicals meet these requirements through:

- a range of occupationally-related qualifications, each with a clear purpose, so that there is a qualification to suit each learner's plan for career progression
- up-to-date content that is closely aligned with employers' needs for a skilled future workforce
- assessments chosen to help learners progress to the next stage. This means that some
 assessments are set by the centre to meet local needs, while others are set and marked
 by Pearson. This ensures that there is a core of skills and understanding common to all
 learners. For example, an externally-set test can be used to check that learners are
 confident in using technical knowledge to carry out a certain job.

We provide a wealth of support, both resources and people, to ensure that learners and their tutors have the best possible experience during their course. See *Section 11 Resources and support* for details of the support we offer.

A word to learners...

BTEC Level 2 Technicals will demand a lot of practical work from you. You will need to:

- complete a range of units
- be organised
- take some assessments that Pearson will set and mark
- take other assessments that will demonstrate your technical and practical skills
- keep a portfolio of your assignments.

But you can feel proud to achieve a BTEC because, whatever your plans in life – whether you decide to go on to work or to an Apprenticeship – success in your BTEC Level 2 Technical qualification will help you to progress to the next stage in your life.

Good luck, and we hope you enjoy your course.

Collaborative development

Learners completing their BTEC Level 2 Technicals will be aiming to go on to employment or to an Apprenticeship. It was essential, therefore, that we developed these qualifications in close collaboration with experts from professional bodies and businesses, and with the providers who will be delivering the qualifications. We are grateful to all the further education lecturers, tutors, employers, professional body representatives and other individuals who have generously shared their time and expertise to help us develop these new qualifications.

In addition, professional bodies and businesses have provided letters of support confirming that these qualifications meet their recruitment requirements. These letters can be viewed on our website.

Summary of Pearson BTEC Level 2 Technical Diploma in Design Production specification Issue 5 changes

Summary of changes made between the previous issue and this current issue	Page number
The points table for the external assessment has been updated to a fixed points scale.	Page 101

Contents

Pe	arson BTEC Level 2 Technicals	1
	Introduction	1
1	Pearson BTEC Level 2 Technical Diploma in Design Production	2
	Purpose	2
	Who is the qualification for?	2
	What does the qualification cover?	2
	What could this qualification lead to?	3
	About the design sector	3
2	Structure	4
	Total Qualification Time (TQT)	4
	Qualification structure	4
	Qualification and unit content	5
	Assessment	5
	Language of assessment	6
	Grading of the qualification	6
	Employer involvement	7
3	Units	9
	Understanding your units	9
4	Planning your programme	81
	Is there a learner entry requirement?	81
	What is involved in becoming an approved centre?	81
	What level of sector knowledge is needed to deliver this qualification?	81
	What resources are required to deliver this qualification?	81
	What makes good vocational teaching?	81
	What are the requirements for meaningful employer involvement?	82
	What support is available for delivery and assessment?	82
	How will my learners become more employable through this qualification?	82
5	Assessment structure	83
6	Internal assessment	84
	Principles of internal assessment	84
	Operating internal assessment	84
	Setting assignments	85
	Making valid assessment decisions	87
7	External assessment	90
	Sample assessment materials	91
	Conducting external assessments	91

BTEC LEVEL 2 TECHNICALS

8	Administrative arrangements	92
	Introduction	92
	Learner registration and entry	92
	Access to assessment	92
	Administrative arrangements for internal assessment	93
	Administrative arrangements for external assessment	94
	Dealing with malpractice in assessment	95
	Certification and results	97
	Additional documents to support centre administration	97
9	Quality assurance	98
	Centre and qualification approval	98
	Continuing quality assurance and standards verification	98
10	Understanding the qualification grade	100
	Awarding and reporting for the qualification	100
	Eligibility for an award	100
	Examples of grade calculations based on table applicable to registrations from September 2017	103
11	Resources and support	105
	Support for setting up your course and preparing to teach	105
	Support for teaching and learning	105
	Support for assessment	105
	Training and support from Pearson	106

Pearson BTEC Level 2 Technicals

Introduction

BTEC Level 2 Technicals are intermediate qualifications for post-16 learners who want to specialise in a specific occupation, occupational area or technical role. They prepare learners for work or an Apprenticeship by giving them the opportunity to develop sector-specific knowledge, technical and practical skills, and to apply these skills in work-related environments. The qualifications also provide progression to Level 3 Tech Level qualifications.

Developed in close conjunction with leading employers, BTEC Level 2 Technicals develop transferable workplace skills, such as good communication and the ability to work in a team, which employers have identified as essential for gaining employment in the sector and for progression once the learner is working.

At the core of these qualifications is the concept of preparing young people for the working world. Through practical activities and occupationally-fit-for-purpose assessments, learners will gain the skills and behaviours needed for sustainable employment.

BTEC Level 2 Technicals are designed to be used flexibly, depending on their size and scope:

- as part of a full-time 16–19 study programme, alongside mathematics and English GCSEs and/or Functional Skills, work placement and enrichment activities
- as the technical qualification within an Apprenticeship or off-the-job training for those already in work
- as a roll-on, roll-off programme for those entering an Apprenticeship or employment.

Pearson has developed the BTEC Level 2 Technicals suite to meet the Department for Education (DfE) requirements for qualifications to be offered as Technical Certificates for 16–19 year olds.

This specification contains the information you need to deliver the Pearson BTEC Level 2 Technical Diploma in Design Production (QN 603/0873/4). The specification signposts you to additional handbooks and policies. It includes all the units for this qualification.

1 Pearson BTEC Level 2 Technical Diploma in Design Production

Purpose

Who is the qualification for?

This qualification is for learners who want to start a career in design. It is designed for post-16 learners and can be taken as part of a wider study programme. It is an ideal qualification for learners intending to progress directly to employment in design or a design-related industry, or via a creative Apprenticeship or further technical education.

What does the qualification cover?

This qualification has been developed in consultation with employers in the design sector of the creative industries to ensure learners develop the skills and behaviours that will give them the best opportunity to be successful when applying for work.

The qualification allows learners to learn about design through practical vocational projects where they apply design thinking and production techniques to develop designs, both collaboratively and individually. This enables them to gain skills in teamwork and communication, as well as learn about technical production skills.

At the end of the qualification, learners will understand the design process and be able to take a concept through to realisation. They will understand through practical engagement the work that goes into design and realising design. The qualification develops understanding and technical skills through mandatory units covering the following.

- Unit 1: Introduction to Design Thinking explores design thinking methods through practical workshops and projects.
- Unit 2: Introduction to Design Production Techniques develops practical skills in design production techniques and processes, used in the design industries. This enables learners to gain the making skills to produce design ideas and prototypes.
- Unit 3: Working with Client Briefs explores the requirements of client briefs used in the design industries and how to integrate feedback into designs, with reference to a target market. This enables learners to gain the skills to plan, pitch and present design ideas that address the needs of the market to a client.
- Unit 4: Design Realisation develops practical skills in producing design prototypes and realising designs within design constraints. This enables learners to further develop their knowledge and experience with design production techniques to refine and realise design proposals.
- Unit 5: Developing a Design Portfolio develops the skills and knowledge needed to produce a design portfolio to support further progression in this field. This unit is designed to build on the skills learners have gained through the qualification.
- Unit 6: Creative Design Project explores the skills needed to develop and produce a design in response to an externally-set creative brief.

The qualification enables learners to build knowledge about the sector and increases their levels of independence and employability; this is achieved through units that build behaviours and attitudes needed to succeed in the creative industries, while developing their technical skills. Learners will also enhance their broader skills in literacy and numeracy, which will be invaluable in supporting progression in other areas.

What could this qualification lead to?

When studied as part of a full study programme, typically alongside maths or English, this qualification is primarily designed to support progression to Apprenticeships and job roles in the creative sector and related industries. The focus on making and production techniques will prepare learners for job roles, including:

- artworker
- visual assistant
- · design and digital print trainee
- marketing and design assistant.

A significant proportion of recruitment in the creative sector is at higher levels and learners may wish to progress to Apprenticeships or further learning, which will support entry to a further range of careers in the sector. When studied as part of a full study programme, the understanding of design concepts and the experience of working collaboratively on design projects will prepare learners for Apprenticeships, such as:

- fashion studio assistant
- junior graphic designer
- junior product designer.

The qualification will allow entry to Pearson BTEC Level 3 National Diplomas in:

- Fashion Design and Production
- Graphics
- 3D Design and Crafts.

About the design sector

The UK creative industries are respected internationally and they form an important part of the UK economy – worth £9.6 million an hour to the economy, which is approximately £84.1 billion per year. Figures show that 5.6% (1.68 million) of all jobs in the UK are in the creative industries and that it is one of the fastest growing areas of employment. The design industry is the UK's fastest growing creative sector and is estimated to be worth £3.2 billion a year to the economy.

2 Structure

Total Qualification Time (TQT)

For all regulated qualifications, Pearson specifies a total number of hours that it is estimated learners will require to complete and show achievement for the qualification: this is the Total Qualification Time (TQT). Within TQT, Pearson identifies the number of Guided Learning Hours (GLH) that we estimate a centre delivering the qualification might provide. Guided learning means activities such as lessons, tutorials, online instruction, supervised study and giving feedback on performance, that directly involve tutors and assessors in teaching, supervising and invigilating learners. Guided learning includes the time required for learners to complete external assessment under examination or supervised conditions.

In addition to guided learning, other required learning directed by tutors or assessors will include private study, preparation for assessment and undertaking assessment when not under supervision, such as preparatory reading, revision and independent research.

The Pearson BTEC Level 2 Technical Diploma in Design Production is a qualification that has:

- Total Qualification Time: 470 hours
- Guided Learning: 360 hours.

Centres should take note of these hours in planning their programme but should also use their professional judgement to determine the provision of guided learning and study time across the units.

Qualification structure

Learners are required to complete and achieve all the units included in this qualification

Pearson BTEC Level 2 Technical Diploma in Design Production				
Unit number	Unit title	GLH	Туре	How assessed
1	Introduction to Design Thinking	60	Mandatory	Internal
2	Introduction to Design Production Techniques	60	Mandatory	Internal
3	Working with Client Briefs	60	Mandatory	Internal
4	Design Realisation	60	Mandatory	Internal
5	Developing a Design Portfolio	30	Mandatory	Internal
6	Creative Design Project	90	Mandatory	External

This qualification has 100% mandatory content and 25% external assessment.

Qualification and unit content

Pearson has developed the content of this qualification in collaboration with employers and representatives from relevant professional bodies and further education providers. In this way, we have ensured that content is up to date and that it includes the knowledge, technical and practical skills and behaviours required to work in the sector and occupational area.

All units in this qualification are mandatory, which provides a balance of breadth and depth, ensuring that all learners develop the technical and practical skills required in the occupational area. Learners are then given the opportunity to develop a range of transferable skills and attributes expected by employers. It is expected that learners will apply their learning to relevant employment and sector contexts during delivery, and that they will have opportunities to engage meaningfully with employers.

BTECs have always required applied learning that brings together knowledge and understanding (the cognitive domain) with practical and technical skills (the psychomotor domain). This is achieved through learners performing practical, work-related tasks that encourage the development of appropriate work-related behaviours (the affective domain) and transferable skills. Transferable skills are those such as communication, teamwork and planning, and completing tasks to high standards, all of which are valued in the workplace.

Our approach provides rigour and balance and promotes the ability to apply learning immediately in new contexts.

Some of the units within the specification may contain references to legislation, policies, regulations and organisations, which may not be applicable in the country you deliver this qualification in (if teaching outside of England), or which may have gone out of date during the lifespan of the specification. In these instances, it is possible to substitute such references with ones that are current and applicable in the country you deliver subject to confirmation by your Standards Verifier.

Assessment

Assessment is designed to fit the purpose and objective of the qualification. It includes a range of assessment types and styles suited to skills and occupationally-based qualifications at this level.

Internal assessment

Units 1, 2, 3, 4 and 5 are assessed through internal assessment. Internal assessment allows learners to apply technical knowledge and demonstrate mastery of practical and technical skills through realistic tasks and activities. This style of assessment promotes deep learning through ensuring the connection between knowledge and practice.

Internal assessment is through assignments that are subject to external standards verification. We provide suggestions in each unit for setting assignments. This means that you can adapt materials to your local contexts and assess assignments that provide the valid and rigorous final assessment for each unit.

You will make grading decisions based on the requirements and supporting guidance given in the units. Learners must achieve all the internal units at Pass grade or above to achieve the qualification. For further information on internal assessment, including resubmissions, see *Section 6 Internal assessment*.

Synoptic external assessment

There is one external unit that provides the main synoptic assessment for this qualification, which assesses a unit that contributes 25% of the total qualification GLH. This synoptic assessment is designed to take place towards the end of the programme to ensure it draws on the learning throughout. The design of this assessment ensures that there is sufficient stretch and challenge, enabling the assessment

of sector-related knowledge and technical and practical skills at the end of the learning period.

The synoptic assessment for this qualification is based on *Unit 6* and takes the form of a vocational activity in which learners respond to a design scenario to carry out research, in order to establish an initial design concept before developing their ideas into a final outcome. In completing this activity, learners will need to identify and use the varied practical skills and technical knowledge of the design process that they have developed during the programme.

In delivering the unit, you need to encourage learners to draw on their broader learning so that they are prepared for the assessment.

The external assessment is taken under specified conditions, then marked by Pearson and a grade awarded according to a weighted points scale. Learners must achieve the external unit at Pass grade or above to achieve the qualification. Learners are permitted to resit the external assessment once but only if they are studying for a period of longer than one year

For further information on external assessment see Section 7 External assessment.

Language of assessment

Assessment of the internal and external units for this qualification will be available in English. All learner work must be in English. A learner taking the qualifications may be assessed in British sign language where it is permitted for the purpose of reasonable adjustment. For information on reasonable adjustments see *Section 8 Administrative arrangements*.

Grading of the qualification

Achievement in the qualification requires a demonstration of depth of study in each unit, assured acquisition of the practical skills required for employment in the specific sector and successful development of transferable skills.

Units are assessed using a grading scale of Distinction, Merit, Pass and Unclassified. All units in the qualification contribute proportionately to the overall qualification grade.

The qualification is graded using a scale of PP to DD. Please see Section 10 Understanding the qualification grade for more details.

The relationship between qualification grading scales and unit grades will be subject to regular review as part of Pearson's standards monitoring processes on the basis of learner performance and in consultation with key users of the qualification.

Employer involvement

Employer involvement in the delivery and/or assessment of technical qualifications provides a clear 'line of sight' to work, enriches learning, raises the credibility of the qualification in the eyes of employers, parents and learners, and furthers collaboration between the learning and skills sector and industry.

You need to ensure that all learners have the opportunity to undertake meaningful activity involving employers during their course.

Examples of 'meaningful activity' include:

- structured work experience or work placements that develop skills and knowledge relevant to the qualification/industry
- project(s), exercise(s) and/or assessments/examination(s) set with input from industry practitioner(s)
- units delivered or co-delivered by an industry practitioner(s); this could take the form of masterclasses or guest lectures
- industry practitioners operating as 'expert witnesses' who contribute to the assessment of a learner's work of practice, operating within a specified assessment framework; this may be a specific project(s), exercise(s) or all assessments for a qualification

Meaningful employer involvement, as defined above, must be with employers related to the design sector and should contribute significantly to at least one mandatory unit.

In the units, we have provided suggestions on how employers could become involved in the delivery and/or assessment of this qualification. Some of these units are listed below with suggestions.

- Unit 1: Introduction to Design Thinking learners could take part in a masterclass from a designer exploring how different design thinking methods are used. They should use a realistic issue to ensure they reflect industry practice and give guidance to learners on how to work through the design thinking stages and iterate and refine ideas.
- Unit 2: Introduction to Design Production Techniques a visit to a design studio or workspace relevant to their sector where learners can explore the different techniques that are being used in the industry. This will enable them to have a greater understanding of the most up-to-date techniques that are being used in the industry.
- Unit 3: Working with Client Briefs a local business providing a client brief for learners to respond to when creating evidence for assessment. The brief should be realistic and reflect genuine industry practice for their chosen design sector, which will enable learners to understand industry standards.
- Unit 4: Design Realisation learners could take part in a masterclass from a designer exploring how different design realisation methods are used. They should use a realistic scenario to ensure they reflect industry practice and give guidance to learners on how to work through the design process to realise a design proposal.
- Unit 5: Developing a Design Portfolio learners present their portfolios to a relevant design industry as part of a mock interview. The company can then provide feedback to contribute to the assessment decisions from a real industry perspective.
- Unit 6: Creative Design Project learners undertake work experience at a relevant design company to observe and experience the creative design process in a real industry scenario. This will provide an opportunity for learners to gain knowledge of how to apply the skills they have developed in a vocational context.

These are suggestions only and there will be other possibilities at local level. Centres may choose to use other approaches but must ensure that they meet the requirement for meaningful employer involvement as defined above. Centres must have an employer involvement plan in place at the start of the programme. It must detail their approach to employer involvement and how it will add value to the delivery and assessment of the qualification.

Each centre's approach to employer involvement will be monitored in two ways. It will be monitored at centre level as part of the annual quality-management review process and captured as part of the standards verification process that addresses centre strategy for delivery, assessment and quality assurance, when we will ask you to show evidence of how employer involvement is provided for all learners. You will need to show evidence in order to gain reporting clearance for certification. It will also be monitored at programme level as part of the standards verification process to confirm that plans for employer involvement meet the requirements of the specification. These approaches are designed to ensure that additional activities can be scheduled where necessary so that learners are not disadvantaged, see *Section 9 Quality assurance*.

3 Units

Understanding your units

The units in this specification set out our expectations of assessment in a way that helps you to prepare your learners for assessment. The units help you to undertake assessment and quality assurance effectively.

Each unit in the specification is set out in a similar way. There are two types of unit format:

- internal units
- · external units.

This section explains how the units work. It is important that all tutors, assessors, internal verifiers and other staff responsible for the programme read and are familiar with the information given in this section.

Internal units

Section	Explanation	
Unit number	The number is in a sequence for the qualification.	
Unit title	This is the formal title of the unit and appears on certificates.	
Level	All units are at Level 2 on the national framework.	
Unit type	This says if the unit is mandatory or optional for the qualification. See Section 2 Qualification structure for details.	
Assessment type	This says how the unit is assessed – i.e. whether it is external, internal or synoptic internal. See <i>Section 2 Qualification structure</i> for details.	
GLH	Units have a GLH value of 60 and 30. This indicates the numbers of hours of teaching, directed activity and assessment expected. It also shows the weighting of the unit in the final qualification grade.	
Unit in brief	A brief formal statement on the content of the unit that is helpful in understanding its role in the qualification. You can use this in summary documents, brochures etc.	
Unit introduction	This is designed with learners in mind. It indicates why the unit is important, how learning is structured and how learning might be applied when progressing to employment or higher education.	
Learning aims	These help to define the scope, style and depth of learning of the unit. You can see where learners should be developing and demonstrating their skills or where they should be actively researching or reviewing.	
Unit summary	This section helps tutors to see at a glance the main content areas against the learning aims and the structure of the assessment. The forms of evidence given are suitable to fulfil the requirements.	
Content	This section sets out the required teaching content of the unit. Content is compulsory except when shown as 'e.g.'. Learners should be asked to complete summative assessment only after the teaching content for the unit or learning aim(s) has been covered.	

Section	Explanation		
Assessment criteria	Each learning aim has assessment criteria to explain the achievement required to obtain Pass, Merit and Distinction grades.		
Essential information for assessment decisions	This information gives guidance for each learning aim or assignment of the expectations for Pass, Merit and Distinction standard. This section contains examples and essential clarification. It is important that this is used carefully alongside the assessment criteria.		
Assessment activity	This section provides information, suggested scenarios and tasks for summative assessment activities.		
Further information for tutors and assessors	The section gives you information to support the delivery and assessment of the unit.		
Delivery guidance	This section offers suggestions of ways of delivering the unit. It offers ideas on practical activities in a sector context that can be used to help develop relevant skills and to encourage progress.		
Essential resources	Any specific resources that you need to be able to teach and assess are listed in this section. For information on support resources see <i>Section 11 Resources and support</i> .		
Links to other units	This section shows you the main relationships of units to other units. This can help you to structure your programme and make the best use of available materials and resources.		
Employer involvement	This section gives you information on the units that can be used to give learners involvement with employers. It will help you to identify the kind of involvement that is likely to be successful.		

External units

Section	Explanation	
Unit number	The number is in a sequence for the qualification.	
Unit title	This is the formal title of the unit and appears on certificates.	
Level	All units are at Level 2 on the national framework.	
Unit type	This says if the unit is mandatory or optional for the qualification. See Section 2 Qualification structure for details.	
Assessment type	This says how the unit is assessed – i.e. whether it is external, internal or synoptic internal. See <i>Section 2 Qualification structure</i> for details.	
GLH	Units have a GLH value of 90. This indicates the numbers of hours of teaching, directed activity and assessment expected. It also shows the weighting of the unit in the final qualification grade.	
Unit in brief	A brief formal statement on the content of the unit.	
Unit introduction	This is designed with learners in mind. It indicates why the unit is important, how learning is structured and how learning might be applied when progressing to employment or higher education.	
Summary of assessment	This sets out the type of external assessment used and the way in which it is used to assess achievement.	
Assessment outcomes	These show the hierarchy of knowledge, understanding, skills and behaviours assessed. For tested units, they include information on how this hierarchy relates to command terms in sample assessment materials (SAMs).	
Essential content	For external units all the content is obligatory, the depth of content is indicated in the assessment outcomes and sample assessment materials (SAMs). The content will be sampled through the external assessment over time, using the variety of questions or tasks shown.	
Grade descriptors	We use grade descriptors when making judgements on grade boundaries. You can use them to understand what we expect to see from learners at particular grades.	
Key terms typically used in assessment	These definitions will help you to analyse requirements and to prepare learners for assessment.	
Links to other units	This section shows the main relationships of units to other units. This section can help you to structure your programme and make the best use of available materials and resources.	
Employer involvement	This section gives you information on the units that can be used to give learners involvement with employers. It will help you to identify the kind of involvement that is likely to be successful.	

BTEC LEVEL 2 TECHNICALS

Units

This section contains all the units developed for this qualification.	
Unit 1: Introduction to Design Thinking	15
Unit 2: Introduction to Design Production Techniques	27
Unit 3: Working with Client Briefs	39
Unit 4: Design Realisation	51
Unit 5: Developing a Design Portfolio	63
Unit 6: Creative Design Project	73

BTEC LEVEL 2 TECHNICALS

Unit 1: Introduction to Design Thinking

Level: 2

Unit type: Mandatory

Assessment type: **Internal** Guided learning hours: **60**

Unit in brief

Learners are introduced to the basics of design thinking, exploring the practice and application of creative problem-solving techniques.

Unit introduction

Designers in all sectors always need to find new ways of approaching problems. Design thinking involves approaching a design problem as an open proposition. It is about using imaginative and playful techniques to explore possibilities and parameters when approaching a problem.

The unit will introduce you to the basics of design thinking, including the practice and application of dynamic problem-solving techniques, such as rapid prototyping, to generate feedback and reflect positive change. You will explore ways to ask questions and learn from others to develop ideas. You will present proposals that address design problems. These will include design solutions that are aimed at a target market or audience. You will gain valuable experience of this stage of the design process. This unit is an introduction to the design process and should be taught in conjunction with *Unit 2: Introduction to Design Production Techniques*.

This qualification will help you in gaining employment in the design sector and will support you in progressing to other design qualifications. Design thinking methods are increasingly used in a wide variety of businesses to develop products and services.

Learning aims

In this unit you will:

- A Identify design needs
- **B** Explore design ideas
- C Present a design proposal.

Unit summary

Learning aim	Key teaching areas	Summary of suggested assessment evidence	
A Identify design needs	A1 Exploring open propositionsA2 Learning from peopleA3 Finding patterns and capturing observations		
B Explore design ideas	B1 Developing responses to a design problemB2 Gathering feedback and refining ideas	Proposal drawn from exploration of design ideas. Learner portfolio of development of ideas.	
C Present a design proposal	C1 Developing proposals		
Key teaching areas in this unit include:			
Sector skills	Knowledge	Transferable	

Sector skills	Knowledge	Transferable skills/behaviours
Working to a briefDevelopment of design thinking skills	Methods of design thinkingDesign briefs	 Problem solving and communication Managing information Self-management and development

Unit content

Knowledge and sector skills

Learning aim A: Identify design needs

Learners should be encouraged to iterate relentlessly and keep reflecting on progress and repeating processes as necessary throughout this stage of the design process. Learners will use workshops and serious play sessions to experiment with and use different design thinking methods when working on the initial stage of the design process.

A1 Exploring open propositions

Learners will experiment with using open questions and propositions at the starting point of the design process and should be encouraged to generate ideas and propositions in a criticism-free environment.

- · Identifying challenges.
- · Targeting real-world benefits.
- · Changing behaviours:
 - o ecology
 - o sustainability
 - social interaction
 - o building communities
 - o starting trends.
- Asking open questions:
 - o 'why?' and 'why not?'
 - o what makes something usable?
 - o what makes a good design?
 - o what makes someone use something again and again?
- · Avoiding restrictions on possible solutions.

A2 Learning from people

Learners will look at different ways to share and develop ideas with other people, which could include peers, family members, online communities or other groups.

- Identifying particular groups, audience or markets.
- Using curiosity and empathy to explore user groups.
- Using social media platforms to engage with others in the development of ideas.
- Using surveys and interviews, online or in person, to generate feedback.
- Using group workshops and teamwork in the development of ideas.
- Creating user profiles.

A3 Finding patterns and capturing observations

Learners will experiment with different ways to look at information collected in the initial stage of the design process to establish patterns and observations.

- Using the '5 whys'.
- Using post-it notes to organise and reorganise ideas and information.
- · Sketch noting.
- Using mind maps
- Visualising ideas and plans.
- · Organising and presenting information to establish patterns.

Learning aim B: Explore design ideas

Learners should look into the different areas to be considered in the design thinking process. They should experiment and workshop different processes, use of sources and recording methods. They will develop their initial design ideas, keeping a record of progress.

B1 Developing responses to a design problem

- · Sketch noting.
- Applying design principles to a design problem.
- Using lateral and divergent thinking (thinking outside the box).
- Using imagination through paper prototyping.
- Establishing purpose, intention, target audience and audience needs.
- Exploring equipment and resources.
- Exploring the underlying design problem.
- Exploring and questioning the possibilities and limitations within a design problem.
- Working collaboratively to explore the context of the problem.
- Researching similar problems and solutions.
- · Reflecting on research findings.
- Investigating potential solutions and making ideas tangible.

B2 Gathering feedback and refining ideas

- Exploring from contextual and primary sources through drawings, using digital media to record and gather visual imagery.
- Using secondary sources, such as web-based sources, magazines, newspapers, viral trends.
- Considering other contextual factors that may influence the work, such as music, styles, film, fine art, science, technology, politics, the environment, culture, world issues, sport, social factors and social networking.
- Ongoing review of progress.
- Keeping a record of the steps taken to develop ideas
- Recording information and reviewing progress throughout the brief.
- Considering what worked and what didn't, and explaining why.
- Refining, revisiting and rethinking ideas.

Learning aim C: Present a design proposal

Learners will develop, produce and present design proposals. They will experiment and workshop methods of presenting and reviewing proposed ideas. These ideas can then be developed in conjunction with *Unit 2: Introduction to Design Production Techniques*.

C1 Developing proposals

- Recording and organising the results of research, explorations and investigations.
- Identifying the basis of ideas noting the starting points.
- Highlighting method(s) that have been used to generate ideas.
- · Visualising ideas and plans.
- Identifying materials, techniques and processes to be used to realise the work during the next part of the design stage.
- Recording and showing preliminary work, paper-based design work and any screen-based work.
- Exploring presentation formats, such as online, onscreen, portfolio, interactive, installation.
- Considering if ultimate choice and use of materials support the design.
- Evaluating and justifying any changes, explaining why decisions were made to refine aspects of the proposal.
- Making decisions on final design thinking proposals.
- Creating final design thinking proposals.
- Presenting final proposal and preliminary work, research, ideas generation and any other relevant information using the most appropriate presentation format.

Transferable skills

Problem solving and communication

• Finding out: obtaining and using information in the proposal.

Managing information

• Producing the proposal in line with brief and meeting customer needs.

Self-management and development

• Managing time, developing professional skills, working to a brief.

Assessment criteria

Pass		Merit	Distinction			
Lear	ning aim A: Identify de	sign needs				
A.P1	Apply design thinking methods and feedback in response to a problem.	A.M1 Apply design thinking methods and feedback efficiently in response to a problem.	AB.D1	•1 Apply design thinking methods creatively, using		
Lear	Learning aim B: Explore design ideas			feedback imaginatively to develop effective design		
B.P2	Demonstrate the development of design solutions using appropriate sources.	B.M2 Demonstrate the effective development of design solutions using usual and unusual sources.		solutions using usual and unusual sources.		
Lear	Learning aim C: Present a design proposal					
C.P3	Present a simple design solution as a proposal communicated in a clear manner.	C.M3 Present an effective design solution as a proposal communicated in a detailed manner.	C.D2	Present an imaginative design solution as a proposal communicated in a comprehensive manner.		

Essential information for assessment decisions

It is recommended that this unit is delivered and assessed as part of a combined project with *Unit 2: Introduction to Design Production Techniques.*

Learning aim A

For distinction standard, learners will:

develop imaginative responses and offer creative solutions to problems. They will
demonstrate a playful and imaginative response and a degree of divergent and lateral
thinking. They will respond imaginatively to the input and views of other people, collected
using feedback, to develop ideas. The methods will be clearly related to the problem as
well as sufficient and valid in progressing learners to a solution.

For merit standard, learners will:

• develop considered responses and offer sound solutions to problems. They will show a well-thought-out response and some divergent thinking. They will show a clear use of the input and views of other people. The methods will be sufficient and valid in progressing learners to a solution.

For pass standard, learners will:

• develop responses and solutions to problems. They will use techniques that are suitable and adequate to the problem they are addressing and will have collected the input of others. The methods will be valid in progressing learners to a solution.

Learning aim B

For distinction standard, learners will:

develop design solutions showing a resourceful approach that is productive and continually
asks questions of the possibilities available. They will demonstrate comprehensive
exploration of the options involved in solving a problem, often combining ideas and
approaches. The solutions will be efficient and realistic, and clearly related to the purpose.
They will use a varied range of sources that are both relevant and valuable to the process.

For merit standard, learners will:

develop design solutions showing a practical approach that is productive and valid and
clearly moves the process forward. They will demonstrate a clear exploration of a number
of the options involved to create solutions to a design problem. They will use a varied
range of sources that are both relevant and valuable to the process.

For pass standard, learners will:

• develop design solutions showing a practical approach that goes some way to moving the process forward. They will show some exploration of the most obvious options involved to suggest solutions. They will use sources that are suitable to the process.

Learning aim C

For distinction standard, learners will:

• present a proposed design solution that is productive and shows some invention. They will show a clear use of creative and divergent thinking in their proposed solution, which will approach the problem from different angles and perspectives. The proposal will be fully formed and be complete and extensive in terms of the necessary information.

For merit standard, learners will:

• present a proposed design solution that is valid and clearly related to the problem. They will show a clear appreciation of the nature of the problem and their solution will be practical in its approach. The proposal will be precise and specific in terms of the information given.

For pass standard, learners will:

• present a proposed design solution that attempts to address the problem. They will show some understanding of the nature of the problem and their proposal will be linked to this. The proposal will be clear and easy to understand in terms of the information given.

Assessment activity

The summative assessment activity takes place after learners have completed their formative development. The activity should be practical, be set in a realistic scenario and draw on learning from the unit, including the transferable skills. You will need to give learners a set period of time and number of hours in which to complete the activity. *Section 6* gives information on setting assignments and there is further information on our website.

A suggested structure for summative assessment is shown in the *Unit summary* section, along with suitable forms of evidence. This is for illustrative purposes only and can therefore be adapted to meet local needs or to assess across units where suitable opportunities exist. The information in the *Links to other units* section will be helpful in identifying opportunities for assessment across units.

The following scenario could be used to produce the required evidence for this unit. Centres are free to use comparable scenarios or other forms of evidence, provided that they meet the assessment requirements of the unit.

Suggested scenario

You have been asked by a technology company to produce a design proposal that starts with the open proposition of 'How can we use less energy?' They want you to explore and develop ideas within your chosen design area.

You will need to use and experiment with different design thinking methods to explore early ideas. You will then develop these ideas to produce a proposal.

If a retake is necessary, an alternative example must be used. The following is an example of a retake assessment activity.

You have been approached by a different company about addressing the issue of 'How can we raise young people's self-esteem?' within your chosen design area.

You need to explore methods and develop your ideas to produce a proposal.

Further information for tutors and assessors

Delivery guidance

The following are examples of practical activities and workshops that tutors could use when developing sector and transferable skills in the delivery of this unit. Wherever possible, practical activities should be used to help learners develop both personal and sector skills in preparation for the final assessment. These suggestions are not intended as a definitive guide to cover the full GLH of the unit.

Introduction to unit

Learners are given open propositions to explore as a group. They will be encouraged to develop and discuss ideas that look at the whole picture. The tutor should guide the discussion by gradually introducing design thinking methods as suggestions.

In small groups, learners will continue developing ideas for the given scenario before sharing with each other how the idea developed.

The tutor will then reveal the design thinking process they have been using and engage the group in a discussion about what they thought worked well and what didn't.

Suggested time: about 4 hours.

Activity: Research workshops

Learners will be introduced to different types of primary and secondary research. They will be given an area to research in pairs and will have to choose the most appropriate methods, recording their findings.

They will present their results to each other before discussing how the different methods worked.

Suggested time: about 6 hours.

Activity: Responding to design problems

Learners will be introduced to examples of design problems and the elements that are found in them.

They will then be given a short brief for them to plan a response to. They will create plans and undertake initial research and experimentation to use in the workshops that follow.

Suggested time: about 8 hours.

Activity: Developing ideas workshops

Learners will use their plan and initial research to continue to develop ideas in response to a problem. They will be led by the tutor as to the different methodologies they have access to.

Suggested time: about 10 hours.

Activity: Presenting a proposal

Learners will be shown different types of proposals and asked to discuss the relative merits of each one. They will then work on creating their own proposal in relation to their previous development work.

They will swap proposals and give each other feedback.

Suggested time: about 4 hours.

Essential resources

For this unit, learners will need access to studio workshops with relevant equipment and materials related to the design sector.

Links to other units

This unit has strong links to:

- Unit 2: Introduction to Design Production Techniques
- Unit 5: Developing a Design Portfolio.

Employer involvement

This unit would benefit from employer involvement, which could be in the form of a masterclass from a designer exploring how different design thinking methods are used. They should use a realistic issue to ensure they reflect industry practice and give guidance to learners on how to work through the design thinking stages and iterate and refine ideas.

BTEC LEVEL 2 TECHNICALS

Unit 2: Introduction to Design Production Techniques

Unit 2: Introduction to Design Production Techniques

Level: 2

Unit type: Mandatory

Assessment type: **Internal** Guided learning hours: **60**

Unit in brief

Learners explore and develop practical skills in design production techniques, resources, equipment and materials to create design prototypes and produce design solutions.

Unit introduction

A designer will develop and explore ideas through design production techniques and processes. Exploration and experimentation are vital parts of the design process and by suspending assumptions you will find ways of working that can inform the development of your designs.

In this unit, you will experiment with different production techniques to develop your practical skills. This will allow you to build your understanding of the design process and safety considerations. You will record your progress and present the outcomes of your tests and experiments. The skills you develop will enable the production of a range of preparatory work and outcomes. This unit is an introduction to the design process and should be taught in conjunction with *Unit 1: Introduction to Design Thinking*.

It is important for all designers to have a firm grasp of fundamental design production techniques in order to develop design solutions. Junior roles in the design sector will often require you to have a good level of knowledge in operating equipment and machinery, understanding processes, and exploring materials and techniques. This unit will develop good transferable skills for you to be able to move into a range of junior roles or progress to further education.

Learning aims

In this unit you will:

- A Explore design production techniques
- **B** Refine design production techniques
- **C** Produce a record of design production techniques.

Unit summary

Learning aim	Key teaching areas	Summary of suggested assessment evidence	
A Explore design production techniques	A1 Exploring production techniques and processes in relation to design sector A2 Using production techniques in relation to design principles		
B Refine design production techniques	B1 Studio work B2 Quality control	Record of evidence of research and productions, such as an illustrated log.	
C Produce a record of design production techniques	C1 Prototyping materials, techniques and processes in relation to design sector C2 Presenting information		
Key teaching areas in this unit include:			
Sector skills	Knowledge	Transferable	

Sector skills	Knowledge	Transferable skills/behaviours
 Using processes appropriate to chosen design sector Using equipment and techniques appropriate to chosen design sector Health and safety 	 Visual language used in design Understanding techniques used in design 	 Preparing for work Developing practical and technical skills Managing information

Unit 2: Introduction to Design Production Techniques

Unit content

Knowledge and sector skills

Learning aim A: Explore design production techniques

Learners will experiment, through workshops, with the different materials (physical or digital) and processes that are used in the design sector. They should look at both materials and processes in appropriate contexts.

A1 Exploring production techniques and processes in relation to design sector

Learners should use workshops to understand and experiment with the qualities and different uses of production techniques as appropriate to their chosen design sector:

- 2D production such as illustration, print, graphics, fashion, surface design
- 3D production such as interiors, models, products, jewellery, furniture
- digital production such as photography, moving image, pixel and/or vector-based software, 3D modelling
- lens-based
- · time-based
- construction
- application
- manipulation
- using equipment
- multi-disciplinary approaches combining techniques and processes
- exploring chance
- exploring characteristics and possibilities.

A2 Using production techniques in relation to design principles

Learners should use workshops to understand and experiment with the visual language of design as appropriate to their chosen design sector:

- form
- function
- decoration
- materials (physical or digital)
- colour
- shapes
- pattern
- texture
- layout
- line
- · tone.

Learning aim B: Refine design production techniques

Learners will take part in workshops, developing their skills in refining materials and techniques used in their chosen design sector, taking into account health and safety issues.

B1 Studio work

Learners take part in structured practice for developing work in the studio as appropriate to their chosen design sector:

- working safely risk assessment and risk management
- operating equipment health and safety
- material exploitation (physical or digital)
- design iteration
- testing different materials
- · testing different techniques
- testing different processes
- planning and working to time constraints.

B2 Quality control

Learners will experiment with methods of maintaining quality of development and checking standards as appropriate to their chosen design sector:

- · sampling and testing
- analysing
- reviewing
- · generating feedback
- · responding to feedback
- · refining responses
- fitness for purpose.

Learning aim C: Produce a record of design production techniques

Learners will take part in workshops that explore the methods involved in producing designs and keep a record of techniques they have experimented with, including checking and refining works and the presentation of ideas. These should all be in the context of the chosen design sector.

C1 Prototyping materials, techniques and processes in relation to design sector

Learners will explore the use of incremental stages and checking functionality. Learners will explore the techniques that are appropriate to their chosen design sector:

- verification of appropriate materials
- · verification of appropriate techniques
- verification of appropriate processes
- maquette
- samples
- toile
- · scale or working model
- · alpha and beta
- wireframe
- · proof of principle
- · visual prototype
- user-experience prototype
- rapid prototype.

Unit 2: Introduction to Design Production Techniques

C2 Presenting information

Ensuring communication to the audience as appropriate to the chosen design sector:

- types of test and trials
- formats of presenting ideas
- type of information recorded in tests and trial.

Transferable skills

Preparing for work

• Undertaking experiments with vocational materials.

Developing practical and technical skills

• Demonstrating methods of using different techniques for design solutions.

Managing information

• Organising information from tests and trials.

Assessment criteria

Pass		Merit	Distinction	
Lear	Learning aim A: Explore design production techniques			
A.P1	Carry out basic practical investigations into design production techniques that demonstrate a basic understanding of design principles.	A.M1 Carry out effective practical investigations into design production techniques showing a detailed understanding of design principles.	A.D1 Carry out thorough and effective practical investigations into design production techniques showing a comprehensive understanding of design principles.	
Lear	Learning aim B: Refine design production techniques			
B.P2	Demonstrate the refinement of production techniques using quality control measures.	B.M2 Demonstrate the refinement of production techniques through iteration using efficient quality control measures.	B.D2 Demonstrate the refinement of production techniques through full exploitation and the use of comprehensive quality control measures.	
Lear	Learning aim C: Produce a record of design production techniques			
C.P3	Produce and present prototypes in an appropriate format.	C.M3 Produce and present prototypes in a coherent and relevant format.	C.D3 Produce and present prototypes and test results in a clear and comprehensive manner.	

Essential information for assessment decisions

It is recommended that this unit is delivered and assessed as part of a combined project with *Unit 1: Introduction to Design Thinking*.

Learning aim A

For distinction standard, learners will:

 use a wide variety of practical techniques to inform their investigations. They will have taken an in-depth approach to trying different techniques considering durability, ethics and fitness for purpose. They will demonstrate extensive explorations into the possibilities of the techniques used, including combining techniques, demonstrating a depth of knowledge. They will use these techniques to imaginatively and playfully explore design principles.

For merit standard, learners will:

• use different practical techniques to inform investigations. They will demonstrate consideration of durability, ethics and fitness for purpose. They will show a considered approach to the selection of production techniques and show a reasonable investigation into the possibilities of combining techniques from different contextual sources. They will use these techniques to consider and explore design principles.

For pass standard, learners will:

 demonstrate basic use of practical techniques and these will be applied to inform investigations. They will show exploration of different techniques but may not consider all possibilities or combinations. Learners will show an awareness of basic properties of techniques, which drive them to immediate solutions rather than take risks or consider alternatives. They will use these techniques to demonstrate awareness of design principles.

Learning aim B

Learners are expected to follow correct safety guidelines at all times.

For distinction standard, learners will:

 refine their use of production techniques by using them imaginatively and by seizing on creative potential from experimentation in design development stages. They will show an extensive manipulation of techniques and materials appropriate to their chosen design sector. This will be enabled through a broad quality control and its application to the design iteration stages, with good levels of evaluative critique. Work will demonstrate correct and safe operation of tools/equipment.

For merit standard, learners will:

apply some structured design iteration when trying to solve design production problems.
 There will be a level of systematic evaluation at stages within the studio exploration of production techniques. Techniques and materials will be tested for their suitability and there will be a productive use of different quality control measures that may be adjusted throughout projects. There will be consideration of safe working practice and the use of tools/equipment.

For pass standard, learners will:

try to test resources and processes in different ways in relation to design problems.
 A range of production techniques will be engaged with, using simple methods with demonstration of competent honing of processes. An inconsistent level of self-evaluation will be used to drive a project forward. Quality control measures will be applied to support refinement but they will be simple and not adapted as the process develops. Basic safety guidelines will be understood and followed.

Learning aim C

For distinction standard, learners will:

produce a record of different techniques across a project to ensure the relevance of
materials and production processes. They will produce prototypes that display a sense
of imagination and understanding of potential possibilities. They may contain sensitive
combinations of processes or resources. Each will have a clear relevance and support the
improvement of a project. The prototypes will be presented along with the results of tests
and trials in a manner that is easy to follow and contains all relevant information to
understand the techniques used.

For merit standard, learners will:

spend time verifying the materials and prototyping techniques through analysing qualities
of craftsmanship and relationship to the design problem. They will produce a record of
work that is valid and shows sufficient control of processes and techniques. They will
produce prototypes that are relevant to the sector and support the development of design
solutions. They will present the results of tests and trials in a format that is easy to follow
and suitable for the chosen design sector.

For pass standard, learners will:

• create prototypes for design problems. Prototypes may be used at some strategic points within a project, but not consistently. Different prototyping will not always be used on the same project and projects may not go through multiple stages of prototyping. Prototypes will present an inconsistent level of craftsmanship. They will present the results of tests and trials in a format that is suitable for the chosen design sector.

Assessment activity

The summative assessment activity takes place after learners have completed their formative development. The activity should be practical, be set in a realistic scenario and draw on learning from the unit, including the transferable skills. You will need to give learners a set period of time and number of hours in which to complete the activity. *Section 6* gives information on setting assignments and there is further information on our website.

A suggested structure for summative assessment is shown in the *Unit summary* section, along with suitable forms of evidence. This is for illustrative purposes only and can therefore be adapted to meet local needs or to assess across units where suitable opportunities exist. The information in the *Links to other units* section will be helpful in identifying opportunities for assessment across units.

The following scenario could be used to produce the required evidence for this unit. Centres are free to use comparable scenarios or other forms of evidence, provided that they meet the assessment requirements of the unit.

Suggested scenario

You are working as part of a design team in your chosen sector and have been given a design proposal relating to the design thinking process on 'How can we use less energy?' that took place in *Unit 1: Introduction to Design Thinking*. You need to develop your skills and knowledge of materials in order to produce effective design prototypes. Your brief expects you to undertake a period of focused exploration of materials and their associated practices and products. You then need to apply this learning to the production of prototypes that show development and improvement. You will need to work safely and maintain the quality of the prototypes consistently through a structured approach that uses appropriate techniques. You should record the evidence of your development through a portfolio with reflection on the safety practice and evaluation of different prototypes.

If a retake is necessary, an alternative example must be used. The following is an example of a retake assessment activity.

Your design team has been approached by a different company and given a new proposal relating to a new design thinking process. You will again develop your techniques and use of materials in creating and presenting a portfolio of prototypes.

Further information for tutors and assessors

Delivery guidance

The following are examples of practical activities and workshops that tutors could use when developing sector and transferable skills in the delivery of this unit. Wherever possible, practical activities should be used to help learners develop both personal and sector skills in preparation for the final assessment. These suggestions are not intended as a definitive guide to cover the full GLH of the unit.

Introduction to unit

A combination of workshops and demonstrations that use a case study relating materials to applications relevant to the selected design sector. Different designers and approaches are discussed and compared.

Suggested time: about 6 hours.

Activity: Introduction to workshops

Learners are inducted into the practices within a workshop covering health and safety and operation of equipment and machinery. Learners will take part in workshops introducing fundamental and underpinning methods appropriate to their chosen design sector.

Suggested time: about 8 hours.

Activity: Practical research

Learners take a practical approach to active research into the specific product area. They will record their development in a portfolio or sketchbook. They will combine practical primary and secondary research into prototyping and design production techniques used by professionals with personal attempts to use these materials and processes in their own way. At the end of this stage, learners will be expected to share the knowledge they discover with peers. This could be done in a group or individual activity. They should be encouraged to apply both experimental and traditional methods within this practical research.

Suggested time: about 10 hours.

Activity: Prototyping and refining

This activity starts with the defining of appropriate and expected prototyping methods within the specific sector. Learners then apply the research knowledge into producing a range of prototypes and record this within the portfolio. Each prototype is expected to build on learning from the previous through a series of question and answer sessions. One of the prototypes needs to be selected and taken further and developed into an outcome. This could be done within the context of a pitch or panel presentation.

Suggested time: about 12 hours.

Activity: Presenting

Using a case study approach, learners assess methods of producing a portfolio relevant to their chosen design sector. They are also introduced to methods of presenting creative development and outcomes. There will be a tutor-led workshop about justifying design choices based on a review of the initial intention of the brief. Finally, this progresses to a short individual presentation that is recorded and combined with a witness statement.

Suggested time: about 6 hours.

Unit 2: Introduction to Design Production Techniques

Essential resources

For this unit, learners will need access to:

- · studio workshops with tools and equipment related to area
- a wide range of materials for use with tools and machinery for creating prototypes
- safety equipment
- a computer, the internet and a printer.

Links to other units

This unit has strong links to:

- Unit 1: Introduction to Design Thinking
- Unit 5: Developing a Design Portfolio.

Employer involvement

This unit would benefit from employer involvement, which could be in the form of a visit to a design studio or workspace relevant to their sector where learners can explore the different techniques that are being used in the industry. This will enable them to have a greater understanding of the most up-to-date techniques that are being used in the industry.

BTEC LEVEL 2 TECHNICALS

Unit 3: Working with Client Briefs

Level: 2

Unit type: Mandatory

Assessment type: **Internal** Guided learning hours: **60**

Unit in brief

Learners explore the content and elements of a client brief and how to apply design development within their chosen design sector.

Unit introduction

The ability to interpret the constraints of a brief ensures that designers produce feasible, functional and relevant work that balances the needs of the client with their own creativity.

In this unit, you will learn about the information contained within a client brief. You will develop your skills in exploring different creative opportunities within a client brief. Based on the effectiveness of your ideas and experiments, in relation to the brief, you will make decisions and define which of your creative responses to take forward. You will define a response and develop and present a design proposal. This unit explores the design process and should be taught in conjunction with *Unit 4: Design Realisation*.

This unit will develop awareness of industry practice and portfolio work that will benefit your progression to roles such as a junior designer.

Learning aims

In this unit you will:

- A Understand the content and constraints in client briefs
- **B** Explore initial responses to client briefs
- **C** Define a proposal in response to a client brief.

Unit summary

Learning aim	Key teaching areas	Summary of suggested assessment evidence
A Understand the content and constraints in client briefs	A1 Requirements of the client briefA2 Design opportunities	
B Explore initial responses to client briefs	B1 Exploring productsB2 Exploring processes	Proposal containing the planned response to a client brief. Annotated portfolio of development of responses.
C Define a proposal in response to a client brief	C1 Refining ideas C2 Defining a proposal	

Key teaching areas in this unit include:

Sector skills	Knowledge	Transferable skills/behaviours
Visual analysisResearchProduction skillsSoftware	Production methodsAudience needsDemographicsDesign cycleProject proposals	Preparing for workPractical and technical skillsManaging information

Unit content

Knowledge and sector skills

Learning aim A: Understand the content and constraints in client briefs

Learners will look at the different restraints and elements contained within a client brief and how it affects their work in their chosen design sector.

A1 Requirements of the client brief

Learners will look at the areas of content found in client briefs:

- · brand colours and house style
- format or product
- budget
- timeframe
- · target audience
- · market research
- · objectives and goals
- · legal and ethical.

A2 Design opportunities

Learners will consider the additions and direction they can bring to the brief to make it personal, as appropriate to their chosen design sector:

- mind mapping word association, creative leaps, innovation, unusual vision
- concept
- mood board
- available materials and equipment
- project scope
- overall style/look
- · similar and existing
- unique selling point (USP)
- schedule
- · quality measures.

Learning aim B: Explore initial responses to client briefs

Learners will experiment through workshops the methods of exploring initial responses to client briefs.

B1 Exploring products

Methods of ideation and visualisation as appropriate to their chosen design sector:

- sketches
- visuals
- samples
- · models and maquettes
- drafts
- prototypes
- swatches.

B2 Exploring processes

Learners will explore ways of testing creative ideas in a structured approach, as appropriate to their chosen design sector:

- testing materials (physical or digital)
- · testing processes
- traditional responses
- · experimental responses
- · recording and collating tests
- · fast prototyping
- · peer review
- · user testing
- · focus groups.

Learning aim C: Define a proposal in response to a client brief

Learners will experiment with the different methods and techniques involved in creating outcomes that are suitable to their chosen design sector.

C1 Refining ideas

Methods of applying structure to the refinement of testing and exploration, as appropriate to their chosen design sector:

- design iteration
- · comparing tests
- reviewing
- · quality control
- · collecting feedback
- critique
- evaluation
- · informed creative decisions
- benchmark testing.

C2 Defining a proposal

Ensure quality and fitness within the final stages of the production process, as appropriate to their chosen design sector:

- completing
- · realising creative intentions
- · matching client expectations
- appropriate materials
- · appropriate methods
- communicating concept
- fitness for purpose
- contingency.

Transferable skills

Preparing for work

• Responding to vocational industry briefs and requirements.

Developing practical and technical skills

• Demonstrating the development of design skills.

Managing information

• Using information from a brief to produce work.

Assessment criteria

Pass		Merit	Distinction	
Lear	Learning aim A: Understand the content and constraints in client briefs			
A.P1	Interpret the content, constraints and design opportunities in a client brief.	A.M1 Analyse the content, constraints and design opportunities in a client brief.	A.D1 Assess how the content and constraints in a client brief relate to design opportunities.	
Lear	Learning aim B: Explore initial responses to client briefs			
B.P2	Demonstrate the exploration and development of initial ideas in response to a client brief.	B.M2 Demonstrate the effective and structured exploration and development of initial ideas in response to a client brief.	B.D2 Demonstrate a comprehensive exploration and development of initial ideas in response to a client brief.	
Lear	Learning aim C: Define a proposal in response to a client brief			
C.P3	Create a simple proposal that meets most requirements of a client brief.	C.M3 Create an effective proposal that meets the requirements of a client brief.	C.D3 Create a comprehensive proposal that resourcefully meets the requirements of a client brief.	

Essential information for assessment decisions

It is recommended that this unit is delivered and assessed as part of a combined project with *Unit 4: Design Realisation*.

Learning aim A

Learners are expected to demonstrate their understanding through practical responses.

For distinction standard, learners will:

• show a broad and extensive grasp of the content and constraints found in a client brief. They will address all technical considerations, demonstrating a complete awareness of how to respond to them and their impact on the process. The technical requirements will have a clear and indelible link to the design opportunities. The technical requirements will be discussed with a secure and accurate use of technical vocabulary.

For merit standard, learners will:

show a clear and reasoned grasp of the content and constraints found in a client brief.
 They will address the technical considerations, demonstrating a logical and rational awareness with a valid link to the design opportunities. Technical requirements will be discussed with a reasonable use of most technical vocabulary.

For pass standard, learners will:

show a satisfactory and fair grasp of the content and constraints found in a client brief.
 They will address the technical requirements in a satisfactory and acceptable manner.
 They will show a basic link to the design opportunities. Some technical requirements will be discussed.

Learning aim B

For distinction standard, learners will:

• use different methods of review as they are undertaking the exploratory and development work. They will show a thorough and wide-ranging approach to the possibilities of their initial ideas. They will carry out tests that build on the learning from previous exploration. Methods will be appropriate to the sector and their approach will be focused on what is feasible within the timeframe. Tests will clearly relate to the communication intentions. A good level of technical expertise will be apparent.

For merit standard, learners will:

• use a range of methods to create tests that loosely relate to the concept in the proposal. Some review may take place of tests but not consistently. They will show a clear and considered approach to their initial ideas and will show practical and valid development. Methods will be appropriate to the sector and approach will be focused on what is feasible within the timeframe. A good level of technical expertise will be apparent.

For pass standard, learners will:

explore a range of initial ideas in response to a brief. Some test methods will be used but
they will not always relate to the sector. They will show some examination of initial ideas
in relation to the brief. Initial ideas will be moved on but not with much thought to
possibilities. Limited review of tests will take place and transitions from one to the next
will not always appear logical or informed. Some technical expertise will show within
the craftsmanship.

Learning aim C

For distinction standard, learners will:

• produce a design proposal for a design sector that is fully formed and goes further than the initial expectations of the client brief. They will have addressed all aspects of the brief and considered many possibilities and external factors. They will be imaginative in terms of their use of resources, techniques and processes, showing a willingness to combine ideas and use divergent thinking.

For merit standard, learners will:

create a design proposal that meets the requirements of a client brief, including all of
the essential elements such as budget, time, and legal and ethical. They will have shown
consideration to all aspects of the brief and some external factors. There will be some level
of refinement and suitable use of resources.

For pass standard, learners will:

create a basic design proposal that shows they are intending to respond to the brief.
 There may not be a clear relationship between the client brief and final outcome but they will have considered some aspects of the brief. The outcome will only take on limited learning from the exploration and development stage.

Assessment activity

The summative assessment activity takes place after learners have completed their formative development. The activity should be practical, be set in a realistic scenario and draw on learning from the unit, including the transferable skills. You will need to give learners a set period of time and number of hours in which to complete the activity. *Section 6* gives information on setting assignments and there is further information on our website.

A suggested structure for summative assessment is shown in the *Unit summary* section, along with suitable forms of evidence. This is for illustrative purposes only and can therefore be adapted to meet local needs or to assess across units where suitable opportunities exist. The information in the *Links to other units* section will be helpful in identifying opportunities for assessment across units.

The following scenario could be used to produce the required evidence for this unit. Centres are free to use comparable scenarios or other forms of evidence, provided that they meet the assessment requirements of the unit.

Suggested scenario

You have been given a brief by a client to create a design product for your chosen sector. You must look at the specific requirements of the brief and explore your initial ideas, taking into account the technical specifications and design opportunities of the brief. You should evidence this stage in a portfolio. You will then develop and create a design proposal to meet these requirements.

If a retake is necessary, an alternative example must be used. The following is an example of a retake assessment activity.

You will need to respond to a new client brief with different requirements.

Further information for tutors and assessors

Delivery guidance

The following are examples of practical activities and workshops that tutors could use when developing sector and transferable skills in the delivery of this unit. Wherever possible, practical activities should be used to help learners develop both personal and sector skills in preparation for the final assessment. These suggestions are not intended as a definitive guide to cover the full GLH of the unit.

Introduction to unit

Learners will look at a variety of examples of client briefs and discuss the different requirements found in them.

In small groups, learners will explore the technical aspects of a brief and come up with a proposed project timeline to work within. They will share their ideas with the rest of the group and provide and receive feedback to and from each other.

Suggested time: about 4 hours.

Activity: Exploring design opportunities

Learners will use a project brief to experiment and explore in small groups the different design opportunities it contains. They will use a range of methods appropriate to their sector, such as mood boards and mind maps, to create outlines of the opportunities available in relation to overall look and available materials.

Suggested time: about 6 hours.

Activity: Exploring methods and processes

Learners will take part in workshops to experiment with different methods of ideation and visualisation, as appropriate to the sector. They will produce sketches, swatches, drafts or other products that are appropriate and discuss as a group the relative merits of the methods.

Suggested time: about 10 hours.

Activity: Testing

Learners will use practical workshops to experiment with a range of tests, methods and processes. They will check them against the specifications in a project brief and discuss their fitness for purpose. A critique will be held at the end of this period, where the strengths and weaknesses of the tests are discussed as a group.

Suggested time: about 10 hours.

Activity: Refining ideas for an outcome

In a practical workshop scenario, learners explore methods of developing and refining ideas for a final outcome. They will experiment with methods of design iteration and collection of feedback.

Suggested time: about 10 hours.

Essential resources

For this unit, learners will need access to:

- studio workshops with tools and equipment related to area
- a wide range of materials for use with tools and machinery for creating prototypes
- safety equipment
- a computer, the internet and a printer.

Links to other units

This unit has strong links to:

- Unit 4: Design Realisation
- Unit 5: Developing a Design Portfolio.

Employer involvement

This unit would benefit from employer involvement, which could be in the form of a local business providing a client brief for learners to respond to when creating evidence for assessment. The brief should be realistic and reflect genuine industry practice for their chosen design sector, which will enable learners to understand industry standards.

BTEC LEVEL 2 TECHNICALS

Unit 4: Design Realisation

Level: 2

Unit type: Mandatory

Assessment type: **Internal** Guided learning hours: **60**

Unit in brief

Learners develop the practical skills needed to develop prototypes and products to realise design proposals.

Unit introduction

Design is a vast field covering familiar everyday items such as fashion, graphics, interiors, software, websites and products. How are these items designed and made? Why do they look the way they do? What makes them good to use? What makes a market-leading design?

In this unit, you will produce designs to a set brief. You will create commercial designs that look good as well as being efficient and functional. You will learn how to make an idea come to life by exploring design techniques and processes. You will develop a design outcome through exploration and experimentation, refining your ideas and understanding design constraints. To complete the unit, you will produce and present an outcome in response to a design proposal. This unit is designed to be taught alongside *Unit 3: Working with Client Briefs*.

This unit allows you to build practical skills in developing designs. This will help you gain employment in a design studio or as an apprentice in design or a design-related field.

Learning aims

In this unit you will:

- A Explore design production techniques to develop responses to design proposals
- **B** Refine design prototypes
- C Present a final design realisation.

Unit summary

Learning aim	Key teaching areas	Summary of suggested assessment evidence
A Explore design production techniques to develop responses to design proposals	A1 How to respond to a design need or opportunityA2 Suitability of techniques for the intended purpose	
B Refine design prototypes	B1 How to develop design, addressing constraintsB2 Refine prototypes and design solutions	Annotated learner portfolio of development of ideas. Final design/product.
C Present a final design realisation	C1 How to target a specific audience	

Key teaching areas in this unit include:

Sector skills	Knowledge	Transferable skills/behaviours
Working to a briefDevelopment of design skillsRefinement of product designs	Methods of designDesign briefs	 Problem solving and communication Managing information Self-management and development

Unit content

Knowledge and sector skills

Learning aim A: Explore design production techniques to develop responses to design proposals

Learners will experiment through workshops the application of different production techniques that are relevant to a design sector.

A1 How to respond to a design need or opportunity

Learners will explore methods of response to design needs or opportunities using materials and processes as appropriate to their chosen design sector:

- notes and annotations
- sketches
- experimenting with 2D processes
- experimenting with 3D processes
- · experimenting with digital processes
- · exploring techniques and processes
- finding inspiration and creative stimulus from the materials and techniques used.

A2 Suitability of techniques for the intended purpose

Learners will explore and assess the suitability of a variety of materials and techniques as appropriate for their chosen design sector:

- exploring the properties and working characteristics of a wide range of 2D and/or 3D and/or digital materials and techniques
- combining materials
- extending knowledge of CAD programs through experimentation with software such as 3D packages, video, animation, fonts, layouts if appropriate
- experimenting with other digital devices such as digital cameras and mobile devices if appropriate
- exploring 2D representation in visual form through drawing, painting, printmaking, collage, photography, photocopying
- considering, anticipating and applying knowledge of known materials and technological developments of the near future
- taking risks, breaking rules and exploring unconventional uses and applications of design materials and technologies
- how to use 2D, 3D and digital materials, techniques and processes safely using good working practices.

Learning aim B: Refine design prototypes

Learners will explore and understand the factors to consider in the refinement of design prototypes within their chosen area of design.

B1 How to develop design, addressing constraints

Prototype and trial addressing:

- functionality, appearance and appeal
- cost factors (in manufacturing and retailing)
- performance (does it work well, or does it underperform?)
- customer support (if things go wrong)
- lifespan
- accessibility (i.e. is it easy to understand and use?)
- · availability and demand
- environmental and ecological constraints
- ergonomics (aesthetics, weight, texture, sound, grip, size)
- health and safety
- sustainability
- · expansion and forward planning
- · repeat production
- technical sophistication (particularly for discerning buyers)
- · advertising and marketing
- · packaging.

B2 Refine prototypes and design solutions

- Addressing:
 - o social situations
 - cultural changes
 - o global economics, economic restrictions
 - o changes to legal requirements and legislation.
- Collecting feedback.
- Responding to audience feedback.
- Considering responses to the design from more than one source.
- Deciding how or whether to act on these responses in further development.
- Developing design through selection, acting on feedback and gaining the opinion of others.

Learning aim C: Present a final design realisation

Learners will explore the factors to consider and methods used to produce and present an outcome applicable to their chosen area of design.

C1 How to target a specific audience

- · Preparing appropriate information.
- Using appropriate visual 2D, 3D verbal and/or written means to support the work.
- Targeting the presentation to the audience.
- Presenting work in a way that supports own ideas and values.
- Applying appropriate digital technology (web pages, social networking sites, blogs, onscreen presentations, demonstrations, videos, supporting handouts, evaluative statements).
- Evaluating own work and performance using various methods of feedback.
- Using feedback to inform future intentions.
- Estimating how the proposed product will respond to future global changes, consumer needs and technological advancements.

Transferable skills

Problem solving and communication

• Finding out: obtaining costings of materials, using information in a proposal.

Managing information

• Money management: calculating and producing a proposal in line with a brief and meeting customer needs.

Self-management and development

• Managing time, developing professional skills, working to a brief.

Assessment criteria

Pass		Merit	Distinction	
	Learning aim A: Explore design production techniques to develop responses to design proposals			
A.P1	Select and use techniques, processes and equipment in a manner that meets some requirements of a design proposal.	A.M1 Select and use techniques, processes and equipment effectively in a manner that efficiently meets the requirements of a design proposal.	A.D1 Select and use techniques, processes and equipment resourcefully in a manner that creatively meets the requirements of a design proposal.	
Lear	ning aim B: Refine desi	gn prototypes		
	Demonstrate the refinement of design prototypes in relation to a design proposal. Carry out the appropriate collection of feedback.	B.M2 Demonstrate the effective refinement of design prototypes in a manner that is clearly linked to a design proposal and feedback.	B.D2 Demonstrate the effective and creative refinement of design prototypes in a manner that has a sustained link to a design proposal and feedback.	
Lear	Learning aim C: Present a final design realisation			
C.P4	Produce and present a design realisation that meets the requirements of a design proposal.	C.M3 Produce and present a design realisation that effectively meets the requirements of a design proposal, reviewing own working process.	C.D3 Produce and present a design realisation that comprehensively meets the requirements of a design proposal,	
C.P5	Describe own working process for the final design realisation.		a design proposal, analysing own working process.	

Essential information for assessment decisions

It is recommended that this unit is delivered and assessed as part of a combined project with *Unit 3: Working with Client Briefs*.

Learning aim A

For distinction standard, learners will:

choose and use contrasting methods, processes and materials in creative ways to develop
diverse and creative designs. Visual explorations will be informed by a variety of sources,
including design solutions in different situations and contexts. They will show full
consideration of the resources at their disposal and the potential of combining ideas
and techniques. They will use the methods and resources in a way that productively
and inventively meets the proposal requirements, showing imagination and awareness.

For merit standard, learners will:

• choose and use contrasting methods, processes and materials in a well-planned and valid way. They will show a clear consideration in the choice and application of processes and equipment and how they link to the proposal. They will use the methods and resources in a way that practically and capably meets the proposal requirements.

For pass standard, learners will:

• choose and use appropriate materials and processes in relation to their chosen design sector. They will show some awareness of what techniques will work in relationship to the proposal but not a full consideration of options. They will use the methods and resources in a way that is suitable and meets some of the proposal requirements.

Learning aim B

For distinction standard, learners will:

• develop solutions through models and prototypes of different types, clearly related to testing objectives. Knowledge of design issues, including sustainability, consumer needs, marketing, social and cultural implications, and technical considerations will be applied through the developments, which will show some invention. They will show a creative and imaginative approach to considering the possibilities and options available. They will show an innovative and open-minded way of thinking when refining ideas, often combining ideas or techniques. They will incorporate feedback into every part of the process. The development and refinement will be clearly and comprehensively linked to the brief and to audience feedback at every stage.

For merit standard, learners will:

 demonstrate, through the refinement of their designs, an understanding of the design being created, and experimental work will draw inspiration from many different contextual sources. A number of technical, environmental, cultural or social developments that potentially impact on the future of design will be negotiated. They will display a clear and structured approach to refinement and iteration with some consideration of options.
 User requirements and technical matters will be addressed in more detailed designs.
 The development and refinement will show a clear link to the brief and to audience feedback.

For pass standard, learners will:

demonstrate, through the refinement of their designs, an awareness of the needs of
different external audiences, such as a potential client. They will demonstrate some
rethinking and development of ideas but they may not expand much on their initial ideas.
They will demonstrate the collection of suitable audience feedback but it may not have a
great influence on the refinement of the designs.

Learning aim C

For distinction standard, learners will:

• produce a design that shows a creative solution to the needs of the brief and present work imaginatively, demonstrating the potential of the design. The final design realisation will display some originality and personal input. They will show all necessary information in a clear and considered manner. They will support the presentation of the work with a considered analysis of their working process that details the process with a level of scrutiny and reflection. They will show an awareness of the positives and negatives of their approach and make clear conclusions and connections with the final product.

For merit standard, learners will:

produce a design realisation that fulfils its purpose in relation to the requirements of the
proposal and will draw on knowledge of audiences and prepare presentation methods,
using appropriate visual, verbal and written methods. The final product will be a valid
and productive response to the proposal and convincing in its relationship with the
development stage. They will provide some consideration of how they work and what
may be improved. There will be some loose connections made with their process and
the outcome.

For pass standard, learners will:

produce a design realisation that is appropriate in relation to the requirements of the brief
and present information about their work clearly, describing their ideas and performance.
The final product will be completed and finalised in relation to the design sector. They will
provide some consideration of how they work but may not make connections between that
and the outcome.

Assessment activity

The summative assessment activity takes place after learners have completed their formative development. The activity should be practical, be set in a realistic scenario and draw on learning from the unit, including the transferable skills. You will need to give learners a set period of time and number of hours in which to complete the activity. *Section 6* gives information on setting assignments and there is further information on our website.

A suggested structure for summative assessment is shown in the *Unit summary* section, along with suitable forms of evidence. This is for illustrative purposes only and can therefore be adapted to meet local needs or to assess across units where suitable opportunities exist. The information in the *Links to other units* section will be helpful in identifying opportunities for assessment across units.

The following scenario could be used to produce the required evidence for this unit. Centres are free to use comparable scenarios or other forms of evidence, provided that they meet the assessment requirements of the unit.

Suggested scenario

You have been asked by a new company to realise a design in your chosen sector that incorporates the company's new range of products with the theme of 'nature versus machine'.

You will need to select and use the appropriate resources and techniques before refining your idea and presenting a product.

If a retake is necessary, an alternative example must be used. The following is an example of a retake assessment activity.

You have been asked by a different company to realise a design in your chosen design sector that responds to or symbolises environmental concerns.

Further information for tutors and assessors

Delivery guidance

The following are examples of practical activities and workshops that tutors could use when developing sector and transferable skills in the delivery of this unit. Wherever possible, practical activities should be used to help learners develop both personal and sector skills in preparation for the final assessment. These suggestions are not intended as a definitive guide to cover the full GLH of the unit.

Introduction to unit

Learners are introduced to different products and discuss how they think they suit their purpose. They will then work in pairs to find examples of products within their sector that they think are well designed. They will present their findings to the group for discussion.

Suggested time: about 3 hours.

Activity: Equipment and resources

Learners are introduced to the different resources and equipment used in their chosen design area. They will be given workshop activities and tasks to introduce the functions and uses of the different resources and equipment and how to use them safely.

Suggested time: about 8 hours.

Activity: Techniques

Learners will take part in workshops allowing them to experiment with different techniques used within their chosen design sector. They will use these workshops to work on specified products.

Suggested time: about 8 hours.

Activity: Refining products

Learners will use the products they worked on in the techniques sessions and will use tutor advice to establish what they need to consider when refining them. They will use the sessions to apply these considerations to their work.

Suggested time: about 10 hours.

Activity: Presenting a product

Learners will be shown methods of presenting their work in their chosen sector. They will discuss the relative merits before choosing a method to present their product.

Suggested time: about 4 hours.

Essential resources

For this unit, learners will need access to:

- equipment and materials relevant to their chosen design area
- working space suitable to their chosen design area.

Links to other units

This unit has strong links to:

- Unit 3: Working with Client Briefs
- Unit 5: Developing a Design Portfolio.

Employer involvement

This unit would benefit from employer involvement, which could be in the form of a masterclass from a designer exploring how different design realisation methods are used. They should use a realistic scenario to ensure they reflect industry practice and give guidance to learners on how to work through the design process to realise a design proposal.

BTEC LEVEL 2 TECHNICALS

UNIT 5: DEVELOPING A DESIGN PORTFOLIO

Unit 5: Developing a Design Portfolio

Level: 2

Unit type: Mandatory

Assessment type: Internal Guided learning hours: 30

Unit in brief

Learners develop a design portfolio and presentation skills for progression in the design industry.

Unit introduction

Getting a foothold in the design industry means demonstrating your skills and achievements. This is most commonly achieved through presenting a portfolio of your design work. Your portfolio is more than a collection of work; it is an opportunity to pull your work together and communicate very specific information and qualities. It will show how you can complete a project, organise information, develop presentation skills and select design work based on the audience.

You will build on the knowledge and skills you have developed on the programme to visually present design work that demonstrates your abilities. You will learn how to present information clearly, telling a story of your design development through visual communication skills. You will look at different ways to present a portfolio, from a live presentation to a live audience to using a suitable online platform. In order to do this effectively, you will have to consider the audience, client's or professional's needs.

Your portfolio will help you progress towards a design career through further education, training or employment. The portfolio you produce will organise the work you have made throughout the qualification. This unit gives you the opportunity to present your portfolio to others, share ideas and gain supportive feedback.

Learning aims

In this unit you will:

- A Design a portfolio to support progression
- **B** Present a portfolio and get feedback.

Unit summary

Learning aim	Key teaching areas	Summary of suggested assessment evidence	
A Design a portfolio to support progression	A1 Defining progression aimsA2 Portfolio design	Design portfolio presented in a suitable manner.	
B Present a portfolio and get feedback	B1 Presenting a portfolio B2 Collecting and reviewing feedback	Collation and response to audience feedback.	
Key teaching areas in this unit include:			
Sector skills	Knowledge	Transferable skills/behaviours	
Designing a portfolioGetting feedback	Purpose of portfoliosTypes of portfolioVisual communicationInformation graphics	Preparing for workManaging informationSelf-management and development	

Unit content

Knowledge and sector skills

Learning aim A: Design a portfolio to support progression

Learners will learn about and explore the different progression opportunities, considerations and methods used to design and compile a portfolio suitable for their chosen design sector.

A1 Defining progression aims

Learners will explore progression opportunities and how they relate to their portfolio design.

- Researching progression opportunities:
 - o job boards
 - local design agencies
 - o freelance opportunities.
- Researching portfolio formats.
- Understanding how designers use progression.
- Creating a personal design statement.
- Exploring design organisation:
 - Design Business Association (DBA)
 - o Design Council
 - o The Association of Illustrators (AOI).

A2 Portfolio design

Organising, collating and ensuring readiness of materials and content in relation to progression aims.

- Identifying areas for progression.
- Defining progression aims.
- Photographing, scanning or copying work.
- Preparing materials beyond static 2D: time-based, temporary, 3D, video, audio.
- Evaluating assets: feedback, critique, reflection.
- Organising assets.
- Demonstrating project progress.
- Informed design choices.
- Copywriting and proofreading.
- The selection process:
 - o overall quality of work
 - o cover or initial sheet
 - o titles
 - o annotations
 - o technical details.

Learning aim B: Present a portfolio and get feedback

Learners will explore the different methods available to present a design portfolio and collect feedback. The presentation method should be relevant to the sector and suitable for learners' work, and could be given to a live audience or presented via an online platform.

B1 Presenting a portfolio

Ensuring work is supported:

- format online, screen, printed, slideshow
- audience peer, group, local designer, lecturer, professional, panel
- scenario interview, critique, presentation
- · notes and support materials
- balance explanation and visuals
- shared copies, economic version, digital version, embedded, links
- conventions of different design sectors: fashion, interior, graphics, product design.

B2 Collecting and reviewing feedback

Opportunities for obtaining quality critique:

- surveys
- questionnaires
- · focus groups
- tutorials
- · client meetings
- talking with the public
- question and answer session following live presentation
- a leaflet
- a handout
- · a summary of achievements as an artist or designer
- an annotated report using own imagery from the portfolio
- · evaluating and using feedback.

Transferable skills

Preparing for work

• Finding out: information on the purpose of portfolios, types of portfolios, ways of presenting.

Managing information

• Organising information contained in portfolios.

Self-management and development

• Preparing for progression.

Assessment criteria

Pass		Merit	Distinction			
Lear	Learning aim A: Design a portfolio to support progression					
A.P1	Produce a design portfolio that shows appropriate selection and organisation.	A.M1 Produce an informed design portfolio that shows effective selection and organisation.	A.D1 Produce an informed design portfolio with a personal style and logical structure that shows well-judged selection and organisation.			
Lear	Learning aim B: Present a portfolio and get feedback					
B.P2	Present a portfolio and collect audience feedback.	B.M2 Present a portfolio in an efficient way and collect and explain audience feedback.	B.D2 Present a portfolio in a thoughtful and imaginative way and evaluate audience feedback.			

Essential information for assessment decisions

Learning aim A

For distinction standard, learners will:

• produce a portfolio that reflects their personality and style. The structure within the portfolio will clearly communicate how they have developed ideas and made creative choices within projects. There will be a sense of narrative within the pages or across the series that is clear to the audience. Project development information will be well laid out using a logical and consistent structure, and information will be easy for the audience to access. The layout of the presentation and key information within the portfolio will be clearly well informed by research into others' portfolios. The format, stock and platform will be informed by research into appropriate methods for the specific sector.

For merit standard, learners will:

produce a portfolio where the layout of the presentation and key information within the
portfolio will be clear for the audience to interpret the projects and appreciate the creative
decisions and ideas-generation process within the projects themselves. The design of the
portfolio itself will be informed by some research into portfolio-making techniques. There
will be some consistency of styling and an emerging personal style that is not always
present throughout the whole of the portfolio. They will have used some industry
techniques and technology to make the portfolio and informed choices about layout,
type and information.

For pass standard, learners will:

produce a design portfolio related to their specialism and focused on their intentions.
 They will have prepared their images and information with varying success and created a vessel, folder, website or slideshow of their work. Work will be supported by basic information to communicate to the audience. Learners will have used some organisation techniques to collect their work together and have developed a basic overview of what a portfolio should contain.

Learning aim B

Learners can present their portfolio in a manner that is suitable to their chosen sector. This could include a live presentation to an audience or a web-based or interactive format.

For distinction standard, learners will:

 present their portfolio in a well-balanced way using a combination of visual and written supportive materials that together combine expressive, purposeful and creative intent. They will show consideration and attention to detail in their choice of presentation. Feedback will be actively sought using relevant methods. Feedback will be evaluated in a meaningful way, with the learner making thoughtful observations about their own performance.

For merit standard, learners will:

 present the portfolio in a way that may take literal inspiration from sources about style, layout, composition, organisation and structure and content. Communication techniques will be considered and relate to the subject area at times. Learners will collect functional feedback and use this to inform their own methods. Information gathered will be explained and compiled into functional information that will relate to their performance.

For pass standard, learners will:

• present clear information about their skills and achievements. Information about projects and the development will be communicated. Communication will be clear for most of the time with some use of technical language. Learners will obtain basic research about collecting feedback. Learners will use a technique to collect feedback.

Assessment activity

The summative assessment activity takes place after learners have completed their formative development. The activity should be practical, be set in a realistic scenario and draw on learning from the unit, including the transferable skills. You will need to give learners a set period of time and number of hours in which to complete the activity. *Section 6* gives information on setting assignments and there is further information on our website.

A suggested structure for summative assessment is shown in the *Unit summary* section, along with suitable forms of evidence. This is for illustrative purposes only and can therefore be adapted to meet local needs or to assess across units where suitable opportunities exist. The information in the *Links to other units* section will be helpful in identifying opportunities for assessment across units.

The following scenario could be used to produce the required evidence for this unit. Centres are free to use comparable scenarios or other forms of evidence, provided that they meet the assessment requirements of the unit.

Suggested scenario

A potential new client has approached you and would like to see examples of your work. They would like you to focus on the work you consider innovative. In order to do this, you will need to create a portfolio using appropriate techniques. You will have to consider the essential information required and explore creative methods of presenting your work. You will then have to prepare your materials and communicate your project and experience in a professional manner. You will have to assess methods of presentation and collecting feedback, and use these to present your own portfolio. From this, collect valuable feedback in order to evaluate potential issues with your portfolio and refine it accordingly.

If a retake is necessary, an alternative example must be used. The following is an example of a retake assessment activity.

A different company approaches you and they would like to see examples of your most aesthetically pleasing work. You will need to compile an up-to-date portfolio to reflect this and present it in a new way and collect new audience feedback for evaluation.

Further information for tutors and assessors

Delivery guidance

The following are examples of practical activities and workshops that tutors could use when developing sector and transferable skills in the delivery of this unit. Wherever possible, practical activities should be used to help learners develop both personal and sector skills in preparation for the final assessment. These suggestions are not intended as a definitive guide to cover the full GLH of the unit.

Introduction to unit

Learners should look at a variety of different relevant portfolios and analyse their construction as a group. Learners then write their own manifesto on dos and don'ts for creative portfolios and share this with the group.

Suggested time: about 3 hours.

Activity: Preparation

Learners need to scan or photograph work carefully, so as not to damage any originals, and then make appropriate choices when editing and scaling the images for print. They then use this to collate all of their materials into key elements of separate projects. This is then presented to peers in a mock interview setting and feedback is used to produce final materials for portfolio.

Suggested time: about 6 hours.

Activity: Production

Introduction to software and equipment for portfolio production in a studio. Learners use the practical skills they have developed to present work in a personalised manner with technical support. Evidence of development is recorded and creative decisions are logged in a blog or diary.

Suggested time: about 10 hours.

Activity: Presentation

Practical research on presentation skills used to support visual material and balance image and discussion. Use of role play and mock presentation of portfolios to peers. Ending in a recorded presentation to a small panel with a witness statement to support evidence.

Suggested time: about 6 hours.

Activity: Evaluation

Seminar and discussions on review and evaluation skills used within industry, followed by practical writing workshop and critique of portfolio and presentation.

Suggested time: about 3 hours.

Essential resources

For this unit, learners will need access to:

- a digital single-lens reflex (DSLR) camera and studio lighting
- a scanner, printer and computer equipment with image-manipulation software.

Links to other units

This unit draws on the knowledge and skills taught in:

- Unit 2: Introduction to Design Production Techniques
- Unit 4: Design Realisation.

Employer involvement

This unit would benefit from employer involvement, which could be in the form of learners presenting their portfolios to a relevant design industry as part of a mock interview. The company can then provide feedback to contribute to the assessment decisions from a real industry perspective.

BTEC LEVEL 2 TECHNICALS

Unit 6: Creative Design Project

Level: 2

Unit type: Mandatory

Assessment type: External Guided learning hours: 90

Unit in brief

This unit offers learners the opportunity to develop and produce creative design work in response to a brief.

Unit introduction

A key skill for any designer is the ability to research and explore ideas in response to a brief and use that to realise a design outcome. This unit will give you the opportunity to develop and produce your own piece of design work. You will respond to a vocational scenario and will use the skills you have learned and developed throughout your course to produce a design.

You will explore ideas in response to a design brief, considering current trends to help you develop your work. You will explore materials, techniques and processes, and use this process to inform your work. You will review and refine your ideas and development throughout the process before completing your final piece. You will present your development and final piece to a good standard. In this unit, you will draw on your learning from across your programme to complete assessment tasks.

The design industry wants employees who are capable of generating ideas and creating products that meet the requirements of a client brief. This unit will provide a creative context for learners wanting to develop the necessary skills, knowledge and understanding of the production process to find employment in the creative industries.

Summary of assessment

This unit is assessed using a task, set and marked by Pearson. The task is worth 72 marks. The final portfolio for submission will be completed in a 20-hour supervised assessment period. All final work will be submitted in a format specified by Pearson. The assessment is available once a year in a timetabled period. The first assessment is available in June 2018.

Sample assessment materials will be available to help centres prepare learners for assessment.

Assessment outcomes

- AO1 Demonstrate understanding of a design brief through selection of relevant research
- AO2 Generate, plan and outline design ideas, informed by research, in response to a brief
- **AO3** Develop and refine design work through exploration of design production techniques and processes
- AO4 Apply design skills to communicate a final design that addresses the requirements of a brief

Essential content

The essential content is set out under content areas. Learners must cover all specified content before the assessment.

A Researching the brief

Learners will explore the processes and techniques used to carry out the research necessary to prepare to respond to a brief.

A1 Understanding the requirements of the brief

Learners will explore and understand how client briefs establish the context for a project and contain essential information, including:

- the aim, purpose or context of the brief
- requirements: to clarify the specifics to be included in the design, e.g. format, size, shape, technical information
- limitations: to clarify the specific limits being placed on the design, e.g. limitations on colour, size, shape etc
- target audience: information about the intended audience(s)
- initial insights into creative requirements in relation to a given theme.

A2 Undertaking research

- Learners will explore research methods and how to apply them to elements of a brief:
 - o research methods:
 - primary including questionnaires, online surveys, interviews, focus groups, vox pops, textual analysis
 - secondary gathering information from secondary sources, such as the internet, books, journals, magazines, archives, media packs, statistics, user reviews.
- Learners will need to understand how to conduct research into:
 - o current design trends and contemporary practice
 - o trend data in relation to relevant areas of design
 - o the target audience/users:
 - to define the target audience/user: demographics, audience profiles, lifestyle
 - to understand the audience's current habits and preferences
 - o existing products to inform design development.
- Thematic research.
- Combining primary and secondary research to enhance ideas.

A3 Selecting information

Learners will explore ways to use their research findings. Learners will need to be able to:

- interpret data to help establish the context of the project
- · select key information to provide a possible focus for the project
- justify selection of ideas, concepts and materials based on the client brief.

B Statement of intent

B1 Generating initial ideas

Learners will look at methods involved in generating ideas in response to a client brief by:

- formulating and recording ideas:
 - o visually
 - o in writing
 - o verbally.

B2 Selecting ideas in response to a design brief

Learners will look at methods involved in selecting ideas in response to a client brief by:

- considering different ideas and approaches
- selecting an idea: justifying the selection and rejection of ideas.

B3 Preparing a statement of intent

Learners will explore ways to clearly communicate their initial ideas in the form of a statement of intent considering:

- presentation methods appropriate to the design sector:
 - o the relevance of initial ideas in relation to the design brief
 - o how research has been used to inform initial ideas
 - o the materials, techniques and processes they are planning to explore
 - o technical considerations
 - o available resources and equipment.

C Developing and refining ideas

C1 Exploring design production techniques

Learners will need to explore design production techniques in their chosen design pathway. This will include:

- experimenting and testing a range of resources, techniques and processes
- understanding and applying relevant health and safety requirements
- producing samples or mood boards, to evaluate the effectiveness of ideas
- combining a range of resources, techniques and processes.

C2 Developing and refining creative work

To develop their design, learners will need to evolve their design:

- progressing initial ideas towards a conclusion that meets the requirements of the brief
- applying iteration and the design cycle
- · recording progress through the development of the project through appropriate methods
- annotation of ideas to inform the development and refinement process.

D Producing the final design

D1 Producing the final design

When producing final design work, learners will need to consider:

- the necessary time and resources needed to carry out design work
- · appropriate application of media
- interpretation of development work
- · modification of work through a process of refinement
- · fitness for purpose of final design
- appropriate methods to realise planned intentions.

D2 Selecting work

Learners will need to explore ways and methods to select work to be included in a portfolio to document the iterative process. This will include:

- · selecting work to demonstrate the creative process
- · selecting work to demonstrate the production process
- organising work to demonstrate stages in the design cycle
- selecting work that demonstrates coherent progress from initial ideas to refined solution
- · organising work to visually represent the iterative process

D3 Presenting work

Learners will explore the different methods available to present work in order to gain an understanding of:

- industry standard formats of presentation appropriate to chosen design sector
- presentation of work which meet requirements of a professional commission or brief
- · capturing and editing digital work to include in the portfolio
- photographing or scanning non-digital outcomes to include in the portfolio
- professional practice when compiling portfolios to include:
 - o clarity of visual images
 - o organisation of images to communicate development of the work
 - o legibility of any annotation or written content.

Grade descriptors

To achieve a grade learners are expected to demonstrate these attributes across the essential content of the unit. The principle of best fit will apply in awarding grades.

Level 2 Pass

Learners will demonstrate an ability to respond appropriately to a vocational scenario undertaking research that is relevant to the design brief. They will show some consideration of the audience and existing products that relate to the brief. They will propose an idea that has a link to the research and brief and shows a sound understanding of the design process and technical aspects. They will select relevant materials and show exploration of techniques, processes and the development and refinement of ideas.

Their final design will be presented in line with the expectations of their chosen design media and show a relationship to the brief. They will demonstrate an ability to realise creative intentions and address the brief showing competent application of design production techniques and processes.

Level 2 Distinction

Learners will demonstrate an assured ability to respond to a vocational scenario, undertaking sustained research that is comprehensively connected to the design brief. They will show a high level of relevant consideration of the audience and sustained links to existing products in their design sector. They will propose an idea that has a clear and comprehensive link to the research and brief and shows an in-depth understanding of the design process and technical aspects. They will select and explore pertinent resources, techniques and processes, and be able to use these to inform the development and refinement of ideas.

Their final design will be presented in a coherent manner relevant to their chosen design media and show a sustained relationship to the brief. They will demonstrate a secure ability to realise creative intentions and address the brief in an imaginative way, showing skilful application of relevant design production techniques and processes.

Key words typically used in assessment

The following table shows the key words that will be used consistently by Pearson in our assessments to ensure learners are rewarded for demonstrating the necessary skills.

Please note: the list below will not necessarily be used in every paper/session and is provided for guidance only.

Command or term	Definition
Communicate	Learners share ideas using an appropriate format, which could include visual, written or other media.
Creative	Learners' use of the imagination or original ideas to create something new.
Demonstrate	Learners give a practical exhibition of their ability to perform tasks or use equipment.
Explore	Learners search for possibilities and potential within resources or techniques.
Relevance	Important to the matter at hand.

Links to other units

This unit has strong links to:

- Unit 1: Introduction to Design Thinking
- Unit 2: Introduction to Design Production Techniques
- Unit 3: Working with Client Briefs
- Unit 4: Design Realisation
- Unit 5: Developing a Design Portfolio.

Employer involvement

This unit would benefit from employer involvement in the form of learners undertaking work experience at a relevant design company to observe and experience the creative design process in a real industry scenario. This will provide an opportunity for learners to gain knowledge of how to apply the skills they have developed in a vocational context.

BTEC LEVEL 2 TECHNICALS

4 Planning your programme

Is there a learner entry requirement?

As a centre, it is your responsibility to ensure that recruited learners have a reasonable expectation of success on the programme. There are no formal entry requirements but we expect learners to have qualifications at or equivalent to Level 1.

Learners are most likely to succeed if they have:

- three or four GCSEs at intermediate grades and/or
- BTEC qualification(s) achieved at least at Level 1
- at least Level 1 equivalent achievement in English and mathematics through GCSE or Functional Skills.

Learners may demonstrate ability to succeed in various ways. For example, learners may have relevant work experience or specific aptitude shown through diagnostic tests or non-education experience.

What is involved in becoming an approved centre?

All centres must be approved before they can offer this qualification – so that you are ready to assess learners and so that we can provide the support needed. Further information is given in *Section 8 Administrative arrangements*.

What level of sector knowledge is needed to deliver this qualification?

We do not set any requirements for tutors but expect centres to assess the overall skills and knowledge of the teaching team to ensure that they are relevant and up to date with current industry practice. This will give learners a rich programme to prepare them for progression.

What resources are required to deliver this qualification?

As part of your centre approval, you will need to show that the necessary material resources and workspaces are available to deliver the qualification. For some units, specific resources are required.

What makes good vocational teaching?

The approach to vocational teaching must be led by what is right for the particular sector. Therefore, each unit includes delivery guidance and suggested assessment tasks. Using the delivery guidance and suggested assessment tasks and our additional free delivery guidance and assignment briefs, you can build a course that contextualises learning in real-life and/or employment scenarios. This will draw in naturally the kind of broader attributes valued in the sector, for example creativity in design, as well as the more general skills needed in work that fit well with project-based learning, for example teamwork, independent learning.

The qualification is designed to be taught through three distinct phases:

Introductory

Through practical workshops, learners are introduced to the design discipline through two units, Unit 1: Introduction to Design Thinking and Unit 2: Introduction to Design Production Techniques, which build their practical skills and introduce them to design thinking methodologies.

Exploratory

During the exploratory phase, learners develop their design skills through practical projects based on vocational scenarios. They apply and develop methods and skills from the introductory phase of the qualification to scenarios where they prototype designs with consideration of practical and conceptual restraints. This stage contains the units *Unit 3: Working with Client Briefs* and *Unit 4: Design Realisation*.

Confirmatory

In the confirmatory stage of the qualification, learners develop a design portfolio to showcase their work and define their progression aims. Learners are externally assessed through a design project that assesses their ability to apply the 'double diamond' design methodology to a vocational scenario.

What are the requirements for meaningful employer involvement?

This qualification has been designed as a Technical Certificate qualification and as an approved centre you are required to ensure that during their study, every learner has access to meaningful activity involving employers. See *Section 2 Structure* and *Section 9 Quality Assurance* for the requirements for employer involvement.

Support for employer involvement

It is important that you give learners opportunities that are of high quality and that are directly relevant to their study. We will support you in this through guidance materials and by giving you examples of best practice. See *Section 11 Resources and support* for details of the support available, including the Work Experience Toolkit.

What support is available for delivery and assessment?

We provide a wealth of support materials, including schemes of learning, delivery plans, assignment briefs, additional papers for external assessments and examples of marked learner work.

To support you with planning your assessments, you will be allocated a Standards Verifier early in the planning stage. There will be extensive training programmes and support from our Subject Advisor team.

For further details see Section 11 Resources and support.

How will my learners become more employable through this qualification?

Learners will be acquiring the key technical and sector knowledge, and practical and technical skills that employers need. Employability skills, such as teamwork and communication, and completing realistic tasks have been built into the design of the learning aims and content. This gives tutors the opportunity to use relevant contexts, scenarios and materials to enable learners to develop a portfolio of evidence that demonstrates the breadth of their skills and knowledge in a way that equips them for employment.

5 Assessment structure

The Pearson BTEC Level 2 Technical Diploma in Design Production is assessed using a combination of *internal assessments*, which are set and marked by tutors, and an *external assessment*, which is set and marked by Pearson.

We have taken great care to ensure that the assessment method chosen is appropriate to the content of the unit and is in line with requirements from employers.

In developing an overall plan for delivery and assessment for the programme, you will need to consider the order in which you deliver units, whether delivery is over short or long periods and when assessment can take place.

One externally-assessed unit in the qualification is defined as synoptic (see *Section 2 Structure*). A synoptic assessment is one that a learner should take later in a programme and in which they will be expected to apply learning from a range of units. As such, you must plan the assignments so that learners can demonstrate learning from across their programme.

We have addressed the need to ensure that the time allocated to final assessment of internallyand externally-assessed units is reasonable so that there is sufficient time for teaching and learning, formative assessment and development of transferable skills.

In administering internal and external assessment, the centre needs to be aware of the specific procedures and policies that apply, for example to registration, entries and results. An overview with signposting to relevant documents is given in *Section 8 Administration arrangements*.

6 Internal assessment

This section gives an overview of the key features of internal assessment and how you, as an approved centre, can offer it effectively. The full requirements and operational information are given in the Pearson *Quality Assurance Handbook* available on our website. All members of the assessment team need to refer to this document.

For this qualification, it is important that you can meet the expectations of stakeholders and the needs of learners by providing a programme that is practical and applied. You can tailor programmes to meet local needs and use links with local employers and the wider vocational sector.

When internal assessment is operated effectively, it is challenging, engaging, practical and up to date. It must also be fair to all learners and meet national standards.

Principles of internal assessment

Our approach to internal assessment for this qualification offers flexibility in how and when you assess learners, provided that you meet assessment and quality assurance requirements. You will need to take account of the requirements of the unit format, which we explain in *Section 3 Units*, and the requirements for delivering assessment given in *Section 8 Administrative arrangements*.

Operating internal assessment

The assessment team

It is important that there is an effective team for internal assessment so that all assessment is planned and verified. For this qualification, it is likely that the team will be small but it is still necessary to ensure that the assessment process is followed. Full information is given in the Pearson *Quality Assurance Handbook*.

The key roles are:

- the Lead Internal Verifier (Lead IV) for the qualification has responsibility for the planning, record keeping and standard setting for the qualification. The Lead IV registers with Pearson annually and organises training using our support materials
- Internal Verifiers (IVs) check that assignments and assessment decisions are valid and that they meet our requirements. In a small team, all people will normally be assessors and IVs. No one can verify their own actions as an assessor
- assessors set or use assignments to assess learners to national standards.

Planning and record keeping

The Lead IV should make sure that there is a plan for assessment of the internally-assessed units and maintain records of assessment undertaken. The key records are:

- · verification of assignment briefs
- learner authentication declarations
- assessor decisions on assignments, with feedback given to learners
- · verification of assessment decisions.

Examples of records and further information are given in the Pearson Quality Assurance Handbook.

Effective organisation

Internal assessment needs to be well organised so that learners' progress can be tracked and so that we can monitor that assessment is being carried out in line with national standards. We support you through, for example, providing training materials and sample documentation. Our online myBTEC service can help support you in planning and record keeping. Further information on using myBTEC can be found in *Section 11 Resources and support* and on our website.

It is particularly important that you manage the overall assignment programme and deadlines to make sure that learners are able to complete assignments on time.

Learner preparation

To ensure that you provide effective assessment for your learners, you need to make sure that they understand their responsibilities for assessment and the centre's arrangements.

From induction onwards, you will want to ensure that learners are motivated to work consistently and independently to achieve the requirements of the qualification. Learners need to understand how assignments are used, the importance of meeting assignment deadlines and that all the work submitted for assessment must be their own.

You will need to explain to learners the requirements of assessment and the expected standard that they need to achieve to attain a grade, how assessments relate to the teaching programme and how they should use and reference source materials, including what would constitute plagiarism. You should also set out your approach to operating assessment, such as how learners must submit work and request extensions.

You are encouraged to employ a range of formative assessment approaches as part of teaching and learning before assessing the units summatively. Formative assessment supports teaching and learning, and should be ongoing throughout the learning process. It enables tutors to enhance learning by giving learners constructive feedback so that they can identify their strengths and weaknesses, and to put measures in place to target areas that need work. To ensure that learners progress, formative assessment approaches that incorporate reflective learning and regular skills assessment are important in encouraging self-development and reflective practice. You can give feedback on the following:

- technique and skills development
- identifying stretch and challenge.

Setting assignments

For internally-assessed units, an assessment task is defined as the independent production of evidence, by the learner, during a set period. The format of assessment tasks can include practical, written and observed activities.

An assignment provides the context for assessment tasks and should be issued to learners as a vocational scenario with a defined start date, a completion date and clear requirements for the production of evidence. A valid assessment task will enable a clear, summative assessment of outcomes based on the assessment criteria.

An assessment task in an assignment must be a distinct activity, completed independently by learners. It is a separate, more formal activity but can follow on from teaching activities that learners complete with direction from tutors.

When setting your assignments, you need to work with the information given in the *Essential information for assessment* decisions and the *Assessment activity* sections of the units. You can choose to use the suggested scenarios or to adapt them to take account of local circumstances, provided that assignments are verified.

In designing your own assignment briefs you should bear in mind the following points.

- A learning aim must always be assessed as a whole.
- Assessment tasks in assignments must be structured to allow learners to demonstrate the full range of achievement at all grade levels. All learners need to be treated fairly by being given the opportunity to achieve a higher grade if they have the ability.
- Learners should be given clear tasks, activities and structures for evidence, the criteria should not be given as tasks.
- Assessment tasks in assignments provide a final summative assessment of a learning aim.
- You must ensure that assignments for synoptic assessment are designed to enable learners to draw on the specific units identified and demonstrate that they can identify and use effectively an appropriate selection of skills, techniques, concepts, theories and knowledge in an integrated way. Assignments for the synoptic unit will be monitored at programme level as part of the standards verification process to ensure that they encourage learners to select and apply their learning from across the qualification in an integrated way.
- Where there is a requirement for assessment to be conducted in the real work environment (mandatory work placement), assignments must be designed to facilitate this. Where there is no mandatory requirement for workplace assessment but learners will be in work placement or work experience settings as a part of the programme, then it would be worthwhile if these assignments were also designed for completion in the real work environment. You must ensure that the work placement or work experience setting gives learners the opportunity to achieve at all grade levels.
- Assessment tasks will draw on the specified range of teaching content for the learning aim.
 The specified teaching content is compulsory. The evidence for assessment need not cover every aspect of the teaching content as learners will normally be given particular examples, case studies or contexts in their assignments. For example, if a learner is carrying out a practical performance, then they must address all the relevant range of content that applies in that instance.

An assignment brief should have:

- a vocational scenario or context that motivates the learner to apply their learning through the assignment
- an audience or purpose for which the evidence is being provided
- clear instructions to the learner about what they are required to do, normally set out through a series of tasks.

Forms of evidence

The units allow for a variety of forms of evidence to be used, provided that they are suited to the type of learning aim and the learner being assessed. For most units, the practical demonstration of skills is necessary. The units give you information on suitable forms of evidence that would give learners the opportunity to apply a range of transferable and sector skills. Centres may choose to use different suitable forms for evidence to those proposed. Overall, learners should be assessed using varied forms of evidence.

The main forms of evidence include:

- observation and recordings of practical tasks or performance in the workplace with
- supporting evidence
- projects
- · recordings of role play, interviews and other types of simulated activities
- oral or written presentations with assessor questioning
- work logbooks and reflective journals.

It is important to note that an observation record is a source of evidence and does not confer an assessment decision. It must be sufficiently detailed to enable others to make a judgement about the quality and sufficiency of the performance and must document clearly the rationale for the assessment decision. Observation records should be accompanied by supporting evidence, which may take the form of videos, audio recordings, photographs, preparation notes, learner logs and other similar types of record.

The form(s) of evidence selected must allow:

- the learner to provide all the evidence required for the learning aim(s) and the associated assessment criteria at all grade levels
- the learner to produce evidence that is their own independent work
- a verifier to independently reassess the learner to check the assessor's decisions.

Centres need to take particular care in ensuring that learners produce independent work.

Making valid assessment decisions

Assessment decisions through applying unit-based criteria

Assessment decisions for this qualification are based on the specific criteria given in each unit and set at each grade level. The way in which individual units are written provides a balance of assessment of sector-specific knowledge, technical and practical skills, and transferable skills appropriate to the purpose of the qualification.

Pass, Merit and Distinction criteria all relate to individual learning aims. The assessment criteria for a unit are hierarchical and holistic where, in satisfying the M criteria, a learner would also have satisfied the P criteria. The unit assessment grid shows the relationships of the criteria so that assessors can apply all the criteria to the learner's evidence at the same time.

Assessors must show how they have reached their decisions using the criteria in the assessment records. When a learner has completed all the assessment for a unit then the assessment team will give a grade for the unit. This is given according to the highest level for which the learner is judged to have met all the criteria. Therefore:

- to achieve a Distinction, a learner must have satisfied all the Distinction criteria (and all the Pass and Merit criteria)); these define outstanding performance across the unit as a whole
- to achieve a Merit, a learner must have satisfied all the Merit criteria (and all the Pass criteria) through high performance in each learning aim
- to achieve a Pass, a learner must have satisfied all the Pass criteria for the learning aims, showing coverage of the unit content and therefore attainment at Level 2 of the national framework.

The award of a Pass is a defined level of performance and cannot be given solely on the basis of a learner completing assignments. Learners who do not satisfy the Pass criteria should be reported as Unclassified.

Making assessment decisions using criteria

Assessors should review authenticated learner work and make judgements on standards using the assessment criteria and the supporting information provided in units and training materials. The evidence from a learner can be judged using all the relevant criteria at the same time. The assessor needs to make a judgement against each criterion that evidence is present and sufficiently comprehensive.

Assessors should use the following information and support in reaching assessment decisions:

- the Essential information for assessment decisions section in each unit
- your Lead IV and assessment team's collective experience, supported by the standardisation materials we provide.

Once the team has agreed the outcome, a formal assessment decision is recorded and reported to learners. The information given:

- must show the formal decision and indicate where criteria have been met
- may show where attainment against criteria has not been demonstrated
- avoid giving direct, specific instructions on how the learner can improve the evidence to achieve a higher grade.

Authenticity of learner work

Assessors must ensure that evidence is authentic to a learner through setting valid assignments and supervising them during the assessment period. Assessors must take care not to provide direct input, instructions or specific feedback that may compromise authenticity.

Once an assessment has begun, learners must not be given feedback that relates specifically to their evidence and how it can be improved, learners must work independently.

An assessor must assess only learner work that is authentic, i.e. learners' own independent work. Learners must authenticate the evidence that they provide for assessment through signing a declaration stating that it is their own work.

Assessors must complete a declaration that:

- the evidence submitted for this assignment is the learner's own
- the learner has clearly referenced any sources used in the work
- they understand that false declaration is a form of malpractice.

Centres can use Pearson templates or their own templates to document authentication.

During assessment, an assessor may suspect that some or all of the evidence from a learner is not authentic. The assessor must then take appropriate action using the centre's policies for malpractice. Further information is given in *Section 8 Administrative arrangements*.

Resubmission of improved evidence

The final assessment of evidence for the relevant learning aims is normally the final assessment decision, except where the Lead IV approves one opportunity to resubmit improved evidence based on the completed assessment.

The Lead IV has the responsibility to make sure that resubmission is operated fairly. This means:

- checking that a learner can be reasonably expected to perform better through a second submission, for example that the learner has not performed as expected
- making sure that giving a further opportunity does not give an unfair advantage over other learners, for example through the opportunity to take account of feedback given to other learners
- checking that the learner will be able to provide improved evidence without further guidance and that the original evidence submitted remains valid.

Once an assessment decision has been given to the learner, the resubmission opportunity must have a deadline within 15 working days in the same academic year. However, we recognise that there are circumstances where the resubmission period may fall outside of the 15-day limit owing to a lack of resources being available, for example where learners may need to access a performance space or have access to specialist equipment. Where it is practical to do so, for example evaluations, presentations, extended writing, resubmission must remain within the normal 15-day period.

For assessment to be fair, it is important that learners are all assessed in the same way and that some learners are not advantaged by having additional time or the opportunity to learn from others. Therefore, learners who did not complete assessment tasks by the planned deadline or by an authorised extension deadline (if one was given for specific circumstances), may not have the opportunity to subsequently resubmit. Similarly, learners who submit work that is not their own should not be given an opportunity to resubmit.

The outcome of any resubmission of the assessment task by the learner is then recorded as the final decision.

A learner who has not achieved their expected level of performance in the relevant learning aims **after resubmission** of an assessment may be offered a single retake opportunity using a new assessment task. The highest grade that may be awarded is a Pass.

The Lead IV must authorise a retake with a new assessment only in exceptional circumstances and where it is necessary, appropriate and fair to do so. For further information on offering a retake opportunity please refer to the *BTEC Centre Guide to Internal Assessment* available on our website. There is information on writing assignments for retakes on our website, see www.btec.co.uk/keydocuments.

7 External assessment

A summary of the type and availability of external assessment for this qualification is given below. This external assessment assesses a unit that is 25% of the total qualification GLH and is weighted to contribute the same proportion of the overall qualification grade using a points scale.

See the units and sample assessment materials for more information.

Unit	Туре	Availability
Unit 6: Creative Design Project	 A task set and marked by Pearson and completed under supervised conditions. The set task is issued in January. The supervised period is 20 hours during the period specified by Pearson. Digital portfolio/ final outcome. 72 marks. 	Once a year. First assessment June 2018

For *Unit 6*, we will issue a different task each year. Learners can complete the task at any time during the timetabled period. The duration and control of the assessment is the same whenever it is completed within the timetabled period and learner evidence can be submitted to Pearson for marking at any time up to the scheduled end of the task period. We will issue results for each task after the marking period for that task.

We will provide annually, in our *Information Manual*, a detailed timetable for entries, assessment and results. Resits cannot be scheduled until a learner's result has been issued.

Learners must be prepared for external assessment by the time they undertake it. In preparing learners for assessment, you will want to take account of required learning time.

Units

The externally-assessed unit has a specific format, which we explain in *Section 3 Units*. The content of the unit will be sampled across external assessments over time through appropriate tasks. The ways in which learners are assessed are shown through the assessment outcomes and grading descriptors.

Sample assessment materials

Each externally-assessed unit has a set of sample assessment materials (SAMs) that accompanies the specification. The SAMs are there to give you an example of what the external assessment will look like in terms of the feel and level of demand of the assessment.

The SAMs show the range of possible activity types that may appear in the actual assessments and give you a good indication of how the assessments will be structured. While SAMs can be used for practice with learners, as with any assessment, the content covered and specific details of the activities will vary in each assessment.

These sample assessments can be downloaded from our website.

Conducting external assessments

Centres must make arrangements for the secure delivery of external assessments. You need to ensure that learners are aware that they need to work independently and that they are aware of the requirements for any external assessment.

Each external assessment has a defined degree of control under which it must take place. We define degrees of control as follows.

Medium control

This is completion of assessment, usually over a longer period of time, which may include a period of supervised conditions. The supervised conditions may allow learners to access resources, prepared notes or the internet to help them complete the task. This applies to task-based assessments.

Further information on responsibilities for conducting external assessment is given in the document *Instructions for Conducting External Assessments*, available on our website.

8 Administrative arrangements

Introduction

This section focuses on the administrative requirements for delivering a BTEC qualification. It will be of value to Quality Nominees, Lead IVs, Programme Leaders and Examinations Officers.

Learner registration and entry

Shortly after learners start the programme of learning, you need to make sure that they are registered for the qualification and that appropriate arrangements are made for internal and external assessment. You need to refer to our *Information Manual* for information on making registrations for the qualification and entries for external assessments.

Learners can be formally assessed only for a qualification on which they are registered. If learners' intended qualifications change, for example if a learner decides to choose a different pathway specialism, then the centre must transfer the learner appropriately.

Access to assessment

Both internal and external assessments need to be administered carefully to ensure that all learners are treated fairly and that results and certificates are issued on time to allow learners to progress to chosen progression opportunities.

Our equality policy requires that all learners have equal opportunity to access our qualifications and assessments, and that our qualifications are awarded in a way that is fair to every learner. We are committed to making sure that:

- learners with a protected characteristic (as defined by the Equality Act 2010) are not, when they are undertaking one of our qualifications, disadvantaged in comparison to learners who do not share that characteristic
- all learners achieve the recognition they deserve for undertaking a qualification and this achievement can be compared fairly to the achievement of their peers.

Further information on access arrangements can be found in the Joint Council for Qualifications (JCQ) document *Access Arrangements, Reasonable Adjustments and Special Consideration for General and Vocational Qualifications*.

Administrative arrangements for internal assessment

Records

You are required to retain records of assessment for each learner. Records should include assessments taken, decisions reached and any adjustments or appeals. Further information can be found in our *Information Manual*. Records must be maintained as specified as we may ask to audit them.

Reasonable adjustments to assessment

To ensure that learners have fair access to demonstrate the requirements of the assessments, a reasonable adjustment is one that is made before a learner takes an assessment. You are able to make adjustments to internal assessments to take account of the needs of individual learners. In most cases, this can be achieved through a defined time extension or by adjusting the format of evidence. We can advise you if you are uncertain as to whether an adjustment is fair and reasonable. You need to plan for time to make adjustments if necessary.

Further details on how to make adjustments for learners with protected characteristics are given on our website in the document *Supplementary guidance for reasonable adjustment and special consideration in vocational internally assessed units*.

Special consideration

Special consideration is given after an assessment has taken place for learners who have been affected by adverse circumstances, such as illness. You must operate special consideration in line with our policy (see previous paragraph). You can provide special consideration related to the period of time given for evidence to be provided or for the format of the assessment if it is equally valid. You may not substitute alternative forms of evidence to that required in a unit or omit the application of any assessment criteria to judge attainment. Pearson can consider applications for special consideration only in line with the policy.

Appeals against assessment

Your centre must have a policy for dealing with appeals from learners. These appeals may relate to assessment decisions being incorrect or assessment being conducted unfairly. The first step in such a policy could be a consideration of the evidence by a Lead IV or other member of the programme team. The assessment plan should allow time for potential appeals after assessment decisions have been given to learners. If there is an appeal by a learner you must document the appeal and its resolution. Learners have a final right of appeal to Pearson but only if the procedures that you have put in place have not been followed. Further details are given in our policy *Enquiries and appeals about Pearson Vocational Qualifications*.

Administrative arrangements for external assessment

Entries and resits

For information on the timing of assessment and entries, please refer to the annual examinations timetable on our website. Learners are permitted to have one resit of an external assessment.

Access arrangements requests

Access arrangements are agreed with Pearson before an assessment. They allow learners with special educational needs, disabilities or temporary injuries to:

- · access the assessment
- show what they know and can do without changing the demands of the assessment.

Access arrangements should always be processed at the time of registration. Learners will then know what type of arrangements are available in place for them.

Granting reasonable adjustments

For external assessment, a reasonable adjustment is one that we agree to make for an individual learner. A reasonable adjustment is defined for the individual learner and informed by the list of available access arrangements.

Whether an adjustment will be considered reasonable will depend on a number of factors to include the:

- needs of the learner with the disability
- effectiveness of the adjustment
- · cost of the adjustment; and
- likely impact of the adjustment on the learner with the disability and other learners.

Adjustment may be judged unreasonable and not approved if it involves unreasonable costs, timeframes or affects the integrity of the assessment.

Special consideration requests

Special consideration is an adjustment made to a learner's mark or grade after an external assessment to reflect temporary injury, illness or other indisposition at the time of the assessment. An adjustment is made only if the impact on the learner is such that it is reasonably likely to have had a material effect on that learner being able to demonstrate attainment in the assessment.

Centres are required to notify us promptly of any learners who they believe have been adversely affected and request that we give special consideration. Further information can be found in the special requirements section on our website.

Dealing with malpractice in assessment

Malpractice means acts that undermine the integrity and validity of assessment, the certification of qualifications, and/or that may damage the authority of those responsible for delivering the assessment and certification.

Pearson does not tolerate actions (or attempted actions) of malpractice by learners, centre staff or centres in connection with Pearson qualifications. Pearson may impose penalties and/or sanctions on learners, centre staff or centres where incidents (or attempted incidents) of malpractice have been proven.

Malpractice may arise or be suspected in relation to any unit or type of assessment within the qualification. For further details regarding malpractice and advice on preventing malpractice by learners, please see Pearson's *Centre Guidance: Dealing with Malpractice*, available on our website.

The procedures we ask you to adopt vary between units that are internally assessed and those that are externally assessed.

Internally-assessed units

Centres are required to take steps to prevent malpractice and to investigate instances of suspected malpractice. Learners must be given information that explains what malpractice is for internal assessment and how suspected incidents will be dealt with by the centre. The *Centre Guidance:* Dealing with Malpractice document gives full information on the actions we expect you to take.

Pearson may conduct investigations if we believe that a centre is failing to conduct internal assessment according to our policies. The above document gives further information, examples and details the penalties and sanctions that may be imposed.

In the interests of learners and centre staff, centres need to respond effectively and openly to all requests relating to an investigation into an incident of suspected malpractice.

Externally-assessed units

External assessment means all aspects of units that are designated as external in this specification, including preparation for tasks and performance. For these assessments, centres must follow the JCQ procedures set out in the latest version of *JCQ Suspected Malpractice in Examinations and Assessments Policies and Procedures* (www.jcq.org.uk).

In the interests of learners and centre staff, centres need to respond effectively and openly to all requests relating to an investigation into an incident of suspected malpractice.

Learner malpractice

Heads of Centres are required to report incidents of any suspected learner malpractice that occur during Pearson external assessments. We ask that centres do so by completing a *JCQ Form M1* (available at www.jcq.org.uk/exams-office/malpractice) and emailing it and any accompanying documents (signed statements from the learner, invigilator, copies of evidence, etc.) to the Investigations Team at candidatemalpractice@pearson.com. The responsibility for determining appropriate sanctions or penalties to be imposed on learners lies with Pearson.

Learners must be informed at the earliest opportunity of the specific allegation and the centre's malpractice policy, including the right of appeal. Learners found guilty of malpractice may be disqualified from the qualification for which they have been entered with Pearson.

Teacher/centre malpractice

Heads of Centres are required to inform Pearson's Investigations Team of any incident of suspected malpractice by centre staff, before any investigation is undertaken. Heads of centres are requested to inform the Investigations Team by submitting a JCQ Form M2(a) (available at www.jcq.org.uk/exams-office/malpractice) with supporting documentation to pqsmalpractice@pearson.com. Where Pearson receives allegations of malpractice from other sources (for example Pearson staff or anonymous informants), the Investigations Team will conduct the investigation directly or may ask the head of centre to assist.

Incidents of maladministration (accidental errors in the delivery of Pearson qualifications that may affect the assessment of learners) should also be reported to the Investigations Team using the same method.

Heads of Centres/Principals/Chief Executive Officers or their nominees are required to inform learners and centre staff suspected of malpractice of their responsibilities and rights; see Section 6.15 of the *JCQ Suspected Malpractice in Examinations and Assessments Policies and Procedures* document.

Pearson reserves the right in cases of suspected malpractice to withhold the issuing of results and/or certificates while an investigation is in progress. Depending on the outcome of the investigation results and/or certificates may be released or withheld.

You should be aware that Pearson may need to suspend certification when undertaking investigations, audits and quality assurances processes. You will be notified within a reasonable period of time if this occurs.

Sanctions and appeals

Where malpractice is proven, we may impose sanctions or penalties.

Where learner malpractice is evidenced, penalties may be imposed such as:

- mark reduction for external assessments
- disqualification from the qualification
- being barred from registration for Pearson qualifications for a period of time.

If we are concerned about your centre's quality procedures, we may impose sanctions such as:

- · working with you to create an improvement action plan
- requiring staff members to receive further training
- placing temporary blocks on your certificates
- placing temporary blocks on registration of learners
- debarring staff members or the centre from delivering Pearson qualifications
- suspending or withdrawing centre approval status.

The centre will be notified if any of these apply.

Pearson has established procedures for centres that are considering appeals against penalties and sanctions arising from malpractice. Appeals against a decision made by Pearson will normally be accepted only from heads of centres (on behalf of learners and/or members or staff) and from individual members (in respect of a decision taken against them personally). Further information on appeals can be found in our *Enquiries and Appeals* policy, which is on our website. In the initial stage of any aspect of malpractice, please notify the Investigations Team by email via pqsmalpractice@pearson.com who will inform you of the next steps.

Certification and results

Once a learner has completed all the required units for a qualification, even if final results for external assessments have not been issued, then the centre can claim certification for the learner, provided that quality assurance has been successfully completed. For the relevant procedures please refer to our *Information Manual*. You can use the information provided on qualification grading to check overall qualification grades.

Results issue

Results for external assessment will be issued once marking is complete.

Qualification results will be issued once a learner has completed all components of the qualification and you have claimed certification. The result will be in the form of a grade. You should be prepared to discuss performance with learners, making use of the information we provide and post-results services.

Post-assessment services

Once results for external assessments are issued, you may find that the learner has failed to achieve the qualification or to attain an anticipated grade. It is possible to transfer or reopen registration in some circumstances. Our *Information Manual* gives further information.

Changes to qualification requests

Where a learner who has taken a qualification wants to resit an externally-assessed unit to improve their qualification grade, you firstly need to decline their overall qualification grade. You must decline the grade before the certificate is issued. For a learner receiving their results in August, you should decline the grade by the end of September if the learner intends to resit an external assessment.

Additional documents to support centre administration

As an approved centre, you must ensure that all staff delivering, assessing and administering the qualifications have access to this documentation. These documents are reviewed annually and are reissued if updates are required.

- Pearson *Quality Assurance Handbook*: this sets out how we will carry out quality assurance of standards and how you need to work with us to achieve successful outcomes.
- *Information Manual*: this gives procedures for registering learners for qualifications, transferring registrations, entering for external assessments and claiming certificates.
- Lead Examiners' Reports: these are produced after each series for each external assessment and give feedback on the overall performance of learners in response to tasks or questions set.
- Instructions for the Conduct of External Assessments: explains our requirements for the effective administration of external assessments, such as invigilation and submission of materials.
- Regulatory policies: our regulatory policies are integral to our approach and explain how we meet internal and regulatory requirements. We review the regulated policies annually to ensure that they remain fit for purpose. Policies related to this qualification include:
 - o adjustments for candidates with disabilities and learning difficulties, access arrangements and reasonable adjustments for general and vocational qualifications
 - age of learners
 - o centre guidance for dealing with malpractice
 - o recognition of prior learning and process.

This list is not exhaustive and a full list of our regulatory policies can be found on our website.

9 Quality assurance

Centre and qualification approval

As part of the approval process, your centre must make sure that the resource requirements listed below are in place before offering the qualification.

- Centres must have appropriate physical resources (for example, equipment, IT, learning materials, teaching rooms) to support the delivery and assessment of the qualification.
- Staff involved in the assessment process must have relevant expertise and/or occupational experience.
- There must be systems in place to ensure continuing professional development for staff delivering the qualification.
- Centres must have in place appropriate health and safety policies relating to the use of equipment by learners.
- Centres must deliver the qualification in accordance with current equality legislation.
- Centres should refer to the teacher guidance section in individual units to check for any specific resources required.

Continuing quality assurance and standards verification

On an annual basis, we produce the Pearson *Quality Assurance Handbook*. It contains detailed guidance on the quality processes required to underpin robust assessment, internal verification and planning of appropriate employer involvement.

The key principles of quality assurance are that:

- a centre delivering BTEC programmes must be an approved centre, and must have approval for the programmes or groups of programmes that it is delivering
- the centre agrees, as part of gaining approval, to abide by specific terms and conditions around the effective delivery and quality assurance of assessment; it must abide by these conditions throughout the period of delivery
- Pearson makes available to approved centres a range of materials and opportunities, through online standardisation, intended to exemplify the processes required for effective assessment, and examples of effective standards. Approved centres must use the materials and services to ensure that all staff delivering BTEC qualifications keep up to date with the guidance on assessment
- an approved centre must follow agreed protocols for standardisation of assessors and verifiers, for the planning, monitoring and recording of assessment processes, and for dealing with special circumstances, appeals and malpractice.

The approach of quality-assured assessment is through a partnership between an approved centre and Pearson. We will make sure that each centre follows best practice and employs appropriate technology to support quality-assurance processes, where practicable. We work to support centres and seek to make sure that our quality-assurance processes do not place undue bureaucratic processes on centres. We monitor and support centres in the effective operation of assessment and quality assurance.

The methods we use to do this for BTEC Technical Certificate and Diploma qualifications include:

- · making sure that all centres complete appropriate declarations at the time of approval
- undertaking approval visits to centres
- making sure that centres have effective teams of assessors and verifiers who are trained to undertake assessment
- undertaking an overarching review and assessment of a centre's strategy for ensuring sufficient and appropriate engagement with employers at the beginning of delivery of any BTEC programme(s)
- undertaking a review of the employer involvement planned at programme level to ensure its appropriateness at a time when additional activities can be scheduled where necessary
- assessment sampling and verification, through requested samples of assessments, completed assessed learner work and associated documentation
- an overarching review and assessment of a centre's strategy for delivering and quality assuring its BTEC programmes.

Centres that do not fully address and maintain rigorous approaches to delivering, assessing and quality assurance cannot seek certification for individual programmes or for the BTEC Technical Certificate and Diploma qualifications. An approved centre must make certification claims only when authorised by us and strictly in accordance with requirements for reporting.

Centres that do not comply with remedial action plans may have their approval to deliver qualifications removed.

10 Understanding the qualification grade

Awarding and reporting for the qualification

This section explains the rules that we apply in providing an overall qualification grade for each learner. The final grade awarded for a qualification represents a holistic performance across all of the qualification. As the qualification grade is an aggregate of the total performance, there is some element of compensation in that a higher performance in some units will be balanced by a lower outcome in others.

Eligibility for an award

In order to be awarded the qualification, a learner must complete all units and achieve a Pass or above in all units. See *Section 2 Structure* for full details.

To achieve the qualification grade, learners must:

- achieve and report a grade (D, M or P) for all units within a valid combination
- achieve the **minimum number of points** at a grade threshold.

Where there are optional units in a qualification, it is the responsibility of the centre to ensure that a correct unit combination is adhered to. Learners who do not pass all the required units shown in the structure will not achieve the qualification. For example, learners who have not passed the required external unit or who have not taken enough mandatory units will not achieve that qualification even if they have enough points.

Calculation of the qualification grade

The final grade awarded for a qualification represents an aggregation of a learner's performance across the qualification. As the qualification grade is an aggregate of the total performance, there is some element of compensation in that a higher performance in some units may be balanced by a lower outcome in others.

In the event that a learner achieves more than the required number of optional units (where available), the mandatory units along with the optional units with the highest grades will be used to calculate the overall result, subject to the eligibility requirements for that particular qualification title.

The qualification is awarded at the grade ranges shown in the table below.

Qualification	Available grade range	
Diploma	PP to DD	

The Calculation of qualification grade table, shown further on in this section, shows the minimum thresholds for calculating these grades. The table will be kept under review over the lifetime of the qualification. The most up to date table will be issued on our website.

Pearson will monitor the qualification standard and reserves the right to make appropriate adjustments.

Learners who do not meet the minimum requirements for a qualification grade to be awarded will be recorded as Unclassified (U) and will not be certificated. They may receive a Notification of Performance for individual units. Our *Information Manual* gives full details.

Points available for internal units

The table below shows the number of **points** available for internal units. For each internal unit, points are allocated depending on the grade awarded.

	Unit size				
	30 GLH 60 GLH				
U	0	0			
Pass	8	16			
Merit	12	24			
Distinction	16 32				

Points available for the external unit

Raw marks from the external units will be awarded **points** based on performance in the assessment. The points scores available for each external unit at grade boundaries are as follows.

	Unit size		
	90 GLH		
U	0		
Pass	24		
Merit	36		
Distinction	48		

We will automatically calculate the points for the external unit once the external assessment has been marked and grade boundaries have been set. For more details about how we set grade boundaries in the external assessment please go to our website.

Claiming the qualification grade

Subject to eligibility, we will automatically calculate the qualification grade for your learners when the internal unit grades are submitted and the qualification claim is made. Learners will be awarded qualification grades for achieving the sufficient number of points within the ranges shown in the relevant calculation of qualification grade table for the cohort.

Calculation of qualification grade table

Diploma					
Grade	Points threshold				
PP	96				
МР	112				
MM	128				
DM	152				
DD	176				

The table is subject to review over the lifetime of the qualification.

The most up-to-date version will be issued on our website.

Examples of grade calculations based on table applicable to registrations from September 2017

Example 1: Achievement of a Diploma with a PP grade

Unit	GLH	Туре	Grade	Points
1	60	Internal	Pass	16
2	60	Internal	Pass	16
3	60	Internal	Pass	16
4	60	Internal	Pass	16
5	30	Internal	Merit	12
6	90	External	Pass	24
	360		PP	100

The learner has achieved a Pass or above in all units.

The learner has sufficient points for a PP grade.

Example 2: Achievement of a Diploma with a DD grade

Unit	GLH	Туре	Grade	Points
1	60	Internal	Distinction	32
2	60	Internal	Distinction	32
3	60	Internal	Distinction	32
4	60	Internal	Distinction	32
5	30	Internal	Distinction	16
6	90	External	Pass	32
	360		DD	176

The learner has sufficient points for a DD grade.

Example 3: Achievement of a Diploma with an Unclassified result

Unit	GLH	Туре	Grade	Points	
1	60	Internal	Merit	24	
2	60	Internal	Pass	16	
3	60	Internal	Unclassified	0	The learner has a U in Unit 3.
4	60	Internal	Pass	16	
5	30	Internal	Pass	8	
6	90	External	Distinction	48	
	360		U	# 112	
					1
The learner has sufficient points for an MP but has not met the requirement for a Pass, or above, in all units.					

11 Resources and support

Our aim is to give you support to enable you to deliver Pearson BTEC Level 2 Technicals with confidence. You will find resources to support teaching and learning, assessing, and professional development on our website.

Support for setting up your course and preparing to teach

Schemes of Learning

Our free Schemes of Learning give you suggestions and ideas for how to deliver the units in the qualifications, including opportunities to develop employability skills, tips on embedding mathematics and English, and how to link units through holistic assessments.

Delivery planner

High-level models showing how the course can be delivered over different timescales, for example six months, one year, two years.

myBTEC

myBTEC is a free, online toolkit that lets you plan and manage your BTEC provision from one place. It supports the delivery, assessment and quality assurance of BTEC qualifications in centres and supports teachers with the following activities:

- checking that a programme is using a valid combination of units
- creating and verifying assignment briefs (including access to a bank of assignment briefs that can be customised)
- creating assessment plans and recording assessment decisions
- tracking the progress of every learner throughout their programme.

To find out more about myBTEC, visit the myBTEC page on the support services section of our website.

Support for teaching and learning

Work Experience Toolkit

Our free Work Experience Toolkit gives guidance for tutors, assessors, work-based supervisors and learners on how to make the most of work placements and work experience.

Pearson Learning Services provides a range of engaging resources to support BTEC qualifications.

Teaching and learning resources may also be available from a number of other publishers. Details of Pearson's own resources and of all endorsed resources are on our website.

Support for assessment

Sample assessment materials for externally-assessed units

Sample assessment materials (SAMs) are available for externally-assessed units and can be downloaded from the Pearson Qualifications website. An additional set of sample assessment materials for externally-assessed units will also be available, giving your learners further opportunities for practice.

Sample assessment materials for internally-assessed units

We do not prescribe the assessments for the internally-assessed units. Rather, we allow you to set your own, according to your learners' preferences.

We provide assignment briefs approved by Pearson Standards Verifiers.

Sample marked learner work

To support you in understanding the expectation of the standard at each grade, examples of sample marked learner work will be made available on our website.

Training and support from Pearson

People to talk to

There are lots of people who can support you and give you advice and guidance on delivering your Pearson BTEC Level 2 Technicals. They include the following.

- Standards Verifiers they can support you with preparing your assignments, ensuring that your assessment plan is set up correctly, in preparing learner work and providing quality assurance through sampling.
- Subject Advisors available for all sectors. They understand all Pearson qualifications in their sector and so can answer sector-specific queries on planning, teaching, learning and assessment.
- Curriculum Development Managers (CDMs) they are regionally based and have a full overview of BTEC qualifications and of the support and resources that Pearson provides.
 CDMs often run network events.
- Customer Services the 'Support for You' section of our website gives the different ways in which you can contact us for general queries. For specific queries, our service operators can direct you to the relevant person or department.

Training and professional development

We provide a range of training and professional development events to support the introduction, delivery, assessment and administration of the Pearson BTEC Level 2 Technicals.

These sector-specific events, developed and delivered by specialists, are available both face to face and online.



BTEC Level 2 Technical Diploma in

DESIGN PRODUCTION

Like what you see?

- Discover the full range of BTEC Level 2 Technicals available.
- Explore free course materials and training events.
- Get your questions answered by our subject experts.

All this and more at: quals.pearson.com/btecL2techDP





Aspire. Do. Achieve. Succeed.

For information about Pearson Qualifications, including Pearson Edexcel, BTEC and LCCI qualifications visit qualifications.pearson.com

Edexcel and BTEC are registered trademarks of Pearson Education Limited

Pearson Education Limited. Registered in England and Wales No. 872828 Registered Office: 80 Strand, London WC2R ORL.

VAT Reg No GB 278 537121



