BTEC

Higher Nationals

COMPUTING AND SYSTEMS DEVELOPMENT

Specification

LEVEL 4 HNC

LEVEL 5 HND

QCF Accredited

Issue 6
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ALWAYS LEARNING

PEARSON

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This specification is Issue 6. Key changes are sidelined. We will inform centres of any changes to this issue. The latest issue can be found on our website: qualifications.pearson.com

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Pearson BTEC Level 4 HNC Diploma in Computing and Systems Development (QCF)

Pearson BTEC Level 5 HND Diploma in Computing and Systems Development (QCF)

The Qualifications and Credit Framework (QCF) was introduced to replace the National Qualifications Framework (NQF). It recognises achievement through the award of credit for units and qualifications, working at all levels between Entry level and level 8.

To accommodate the framework we took the opportunity to revise the academic level and size of the BTEC HNCs (Higher National Certificates). These are now at level 4 and are a minimum of 120 credits in size. They have been nested within the structures of the BTEC HNDs (Higher National Diplomas).

BTEC HNDs are level 5 qualifications. They are a minimum of 240 credits in size.

The qualifications remain as Intermediate level qualifications on the Framework for Higher Education Qualifications (FHEQ). Progression to BTEC Higher Nationals continues to be from level 3 qualifications. Progression from BTEC Higher Nationals will normally be to qualifications at level 6. Learners' progression routes do not necessarily involve qualifications at every level.

As a nested qualification the HNC is an embedded component of the HND. However, it can be taken as a stand-alone qualification.

If a learner enrols for an HNC they would be eligible to gain a grade for the HNC. If they then move onto an HND, the learner is graded on their HND performance. The grade for the HND will include units from the previously achieved HNC.

If a learner opts to take an HND from the start, then on successful completion of the HND they will receive one grade for the HND achievement only.

If a learner opts to take an HND from the start but later chooses to revert to an HNC programme, then on successful completion of the HNC they will receive a grade for the HNC achievement only.

Existing NQF Higher National units achievement can count towards the QCF BTEC Higher Nationals. (See *Annexe D* for NQF to QCF unit mapping.)

BTEC Higher Nationals within the QCF, NQF and FHEQ

QCF/NQF/ FHEQ level	Progression opportunities and examples of qualifications within each level
8	PhD/DPhil Professional doctorates (credit based), e.g. EdD
7	Master's degrees Postgraduate diplomas Postgraduate Certificate in Education (PGCE)
6	Bachelor's degrees, e.g. BA, BSc Professional Graduate Certificate in Education Graduate certificates and diplomas
5	**BTEC HNDs** (Higher National Diplomas) Foundation Degrees, e.g. FdA, FdSc Diplomas of Higher Education (Dip HE)
4	**BTEC HNCs** (Higher National Certificates) Certificates of Higher Education (Cert HE) Level 4 National Vocational Qualifications (NVQs)
3	BTEC Level 3 Extended Diplomas BTEC Level 3 Diplomas BTEC Level 3 Subsidiary Diplomas BTEC Level 3 Certificates GCE Advanced Level Level 3 NVQs Advanced Diplomas

UNITS

The units for the BTEC Higher Nationals in Computing and Systems Development (QCF) are on the CD ROM that accompanies this specification and on our website.

Contents

Purpose of this specification

The purpose of a specification as defined by Ofqual is to set out:

- the qualification's objective
- any other qualification that a learner must have completed before taking the qualification
- any prior knowledge, skills or understanding that the learner is required to have before taking the qualification
- units that a learner must have completed before the qualification will be awarded and any optional routes
- any other requirements that a learner must have satisfied before they will be assessed or before the qualification will be awarded
- the knowledge, skills and understanding that will be assessed as part of the qualification (giving a clear indication of their coverage and depth)
- the method of any assessment and any associated requirements relating to it
- the criteria against which the learner's level of attainment will be measured (such as assessment criteria)
- any specimen materials
- any specified levels of attainment.

Qualification titles covered by this specification

Pearson BTEC Level 4 HNC Diploma in Computing and Systems Development (QCF)

Pearson BTEC Level 5 HND Diploma in Computing and Systems Development (QCF)

These qualifications have been accredited to the Qualifications and Credit Framework (QCF). The Qualification Numbers (QNs) for these qualifications are listed below.

These qualification titles are as they will appear on learners' certificates. Learners need to be made aware of this when they are recruited by the centre and registered with Pearson. Providing this happens, centres are able to describe the programme of study leading to the award of the qualification in different ways to suit the medium and the target audience.

The Quality Assurance Agency for Higher Education (QAA) has produced guidelines for centres in preparing programme specifications (reference *Guidelines for preparing programme specifications*: UK Quality Code for Higher Education, Part A Chapter A3.)

Qualification Numbers

The Qualifications and Credit Framework (QCF) code is known as a Qualification Number (QN). Each unit within a qualification will also have a QCF unit code.

The QCF qualification and unit codes will appear on learners' final certification documentation.

The QNs for qualifications in this publication are:

500/8254/1	Pearson BTEC Level 4 HNC Diploma in Computing and Systems Development (QCF)
500/8253/X	Pearson BTEC Level 5 HND Diploma in Computing and Systems Development (QCF)

Introduction

This specification contains the units and associated guidance for the Pearson BTEC Level 4 HNC Diploma in Computing and Systems Development (QCF) and the Pearson BTEC Level 5 HND Diploma in Computing and Systems Development (QCF).

Each unit sets out the required learning outcomes, assessment criteria and content and may also include advice regarding essential delivery and assessment strategies.

This document also contains details of the teaching, learning, assessment and quality assurance of these qualifications. It includes advice about our policies regarding access to our qualifications, the design of programmes of study and delivery modes.

Structure of the qualification

BTEC Level 4 HNC Diploma

The Pearson BTEC Level 4 HNC Diploma in Computing and Systems Development (QCF) is a qualification with a minimum of 120 credits of which 45 credits are mandatory core.

The BTEC Level 4 HNC Diploma programme must contain a minimum of 65 credits at level 4.

BTEC Level 5 HND Diploma

The Pearson BTEC Level 5 HND Diploma in Computing and Systems Development (QCF) is a qualification with a minimum of 240 credits of which 65 credits are mandatory core.

The BTEC Level 5 HND Diploma programme must contain a minimum of 125 credits at level 5 or above.

Rules of combination for BTEC Levels 4 and 5 Higher National qualifications

The rules of combination specify the:

- total credit value of the qualification
- minimum credit to be achieved at the level of the qualification
- mandatory core unit credit
- specialist unit credit
- maximum credit that can be centre devised or imported from other QCF BTEC Higher National qualifications.

When combining units for a BTEC Higher National qualification it is the centre's responsibility to ensure that the following rules of combination are adhered to:

Pearson BTEC Level 4 HNC Diploma in Computing and Systems Development (QCF)

1 Qualification credit value: a minimum of 120 credits. A maximum of 55 credits may be at level 5.

2 Minimum credit to be achieved at the level of the qualification (level 4): 65 credits.

3 Mandatory core unit credit: 45 credits.

4 Specialist unit credit: (120–45) = 75 credits.

5 A maximum of 30 credits can be centre devised or imported from other QCF BTEC Higher National qualifications to meet local needs. Level rules and mandatory core units must not be changed.

Pearson BTEC Level 5 HND Diploma in Computing and Systems Development (QCF)

1 Qualification credit value: a minimum of 240 credits. A minimum of 65 credits must be at level 4; and a maximum of 30 credits may be at level 6.

2 Minimum credit to be achieved at the level of the qualification (level 5) or above: 125 credits.

3 Mandatory core unit credit: 65 credits.

4 Specialist unit credit: (240–65) = 175 credits.

5 The requirements of the HNC have to be met.

6 A maximum of 60 credits can be centre devised or imported from other QCF BTEC Higher National qualifications to meet local needs. Level rules and mandatory core units must not be changed.

Structure of the Pearson BTEC Level 4 HNC Diploma in Computing and Systems Development (QCF)

Unit number	Mandatory core units — all three units must be taken	Unit level	Unit credit
1	Business Skills for e-Commerce	4	15
2	Computer Systems	4	15
3	Employability and Professional Development	4	15
	Specialist units — choose units with a total credit value of 75 credits		
4	Project Design, Implementation and Evaluation	5	20
5	Emerging Technologies	4	15
6	Management in IT	4	15
7	Research Skills	4	15
8	Management of Projects	4	15
9	Systems Analysis and Design	4	15
10	Human Computer Interaction	4	15
11	Digital Media in Art and Design	4	15
12	2D, 3D and Time-based Digital Applications	4	15
13	Multimedia Design and Authoring	4	15
14	Website Design	4	15
15	Website Management	4	15
16	e-Commerce Technologies	4	15
17	Database Design Concepts	4	15
18	Procedural Programming	4	15
19	Object Oriented Programming	4	15
20	Event Driven Programming Solutions	4	15
21	Software Applications Testing	4	15
22	Office Solutions Development	4	15
23	Mathematics for Software Development	4	15
24	Networking Technologies	4	15
25	Routing Concepts	4	15
26	Design a Small or Home Office Network	4	15
27	Network Operating Systems	4	15
28	IT Support for End Users	4	15

Unit number	Specialist units — choose units with a total credit value of 75 credits	Unit level	Unit credit
29	e-Commerce Strategy	5	15
30	Information Systems in Organisations	5	15
31	Knowledge-based Systems	5	15
32	Quality Systems in IT	5	15
33	Data Analysis and Design	5	15
34	Data Structures and Algorithms	5	15
35	Web Applications Development	5	15
36	Internet Server Management	5	15
37	Digital Image Creation and Development	5	15
38	3D Computer Modelling and Animation	5	15
39	Computer Games Design and Development	5	15
40	Distributed Software Applications	5	15
41	Programming in Java	5	15
42	Programming in .NET	5	15
43	Networking Infrastructure	5	15
44	Local Area Networking Technologies	5	15
45	Wide Area Networking Technologies	5	15
46	Network Security	5	15
47	IT Virtualisation	5	15
48	IT Security Management	5	15
49	Digital Forensics	5	15
50	Work-based Experience	5	15
51	Computer Systems Architecture	3	10
52	Spreadsheet Modelling	3	10
53	Web Server Scripting	3	10
54	Multimedia Design	3	10

Vendor Certifications	**Minimum level required: level 3**

A complete list of units for the vendors given below is now available on the BTEC Higher Nationals in Computing and Systems Development section of our website.

Vendor certifications are only available from the following vendors at the levels indicated for this qualification.

Further information on vendor certifications is available on our website.

Vendor Certification	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Cisco		3	3	
CompTIA		3		
Linux		3		
Microsoft		3	3	3
Oracle		3		
VM Ware		3		

Vendor Certification	**Level**	**Minimum Credits**
Vendor Unit	3	7
Vendor Unit	4	9
Vendor Unit	5	15

The BTEC Level 4 HNC programme must contain a minimum of 65 credits at level 4.

Structure of the Pearson BTEC Level 5 HND Diploma in Computing and Systems Development (QCF)

Unit number	Mandatory core units — all four units must be taken	Unit level	Unit credit
1	Business Skills for e-Commerce	4	15
2	Computer Systems	4	15
3	Employability and Professional Development	4	15
4	Project Design, Implementation and Evaluation	5	20
	Specialist units — choose units with a total credit value of 175 credits		
5	Emerging Technologies	4	15
6	Management in IT	4	15
7	Research Skills	4	15
8	Management of Projects	4	15
9	Systems Analysis and Design	4	15
10	Human Computer Interaction	4	15
11	Digital Media in Art and Design	4	15
12	2D, 3D and Time-based Digital Applications	4	15
13	Multimedia Design and Authoring	4	15
14	Website Design	4	15
15	Website Management	4	15
16	e-Commerce Technologies	4	15
17	Database Design Concepts	4	15
18	Procedural Programming	4	15
19	Object Oriented Programming	4	15
20	Event Driven Programming Solutions	4	15
21	Software Applications Testing	4	15
22	Office Solutions Development	4	15
23	Mathematics for Software Development	4	15
24	Networking Technologies	4	15
25	Routing Concepts	4	15
26	Design a Small or Home Office Network	4	15
27	Network Operating Systems	4	15

Unit number	Specialist units — choose units with a total credit value of 175 credits	Unit level	Unit credit
28	IT Support for End Users	4	15
29	e-Commerce Strategy	5	15
30	Information Systems in Organisations	5	15
31	Knowledge-based Systems	5	15
32	Quality Systems in IT	5	15
33	Data Analysis and Design	5	15
34	Data Structures and Algorithms	5	15
35	Web Applications Development	5	15
36	Internet Server Management	5	15
37	Digital Image Creation and Development	5	15
38	3D Computer Modelling and Animation	5	15
39	Computer Games Design and Development	5	15
40	Distributed Software Applications	5	15
41	Programming in Java	5	15
42	Programming in .NET	5	15
43	Networking Infrastructure	5	15
44	Local Area Networking Technologies	5	15
45	Wide Area Networking Technologies	5	15
46	Network Security	5	15
47	IT Virtualisation	5	15
48	IT Security Management	5	15
49	Digital Forensics	5	15
50	Work-based Experience	5	15
51	Computer Systems Architecture	3	10
52	Spreadsheet Modelling	3	10
53	Web Server Scripting	3	10
54	Multimedia Design	3	10

Vendor Certifications	**Minimum level required: level 3**
A complete list of units for the vendors given below is now available on the BTEC Higher Nationals in Computing and Systems Development section of our website. Vendor certifications are only available from the following vendors at the levels indicated for this qualification. Further information on vendor certifications is available on our website.	

Vendor Certification	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Cisco		3	3	
CompTIA		3		
Linux		3		
Microsoft		3	3	3
Oracle		3		
VM Ware		3		

Vendor Certification	**Level**	**Minimum Credits**
Vendor Unit	3	7
Vendor Unit	4	9
Vendor Unit	5	15

The BTEC Level 5 HND programme must contain a minimum of 125 credits at level 5.

Optional vendor units

The accreditation of vendor units is now handled by the SSC (e-Skills UK). Pearson has added units from the vendors listed below to the BTEC Level 4 HNC Diploma in Computing and Systems Development (QCF) and BTEC Level 5 HND Diploma in Computing and Systems Development (QCF):

- CompTIA
- Cisco
- IBM
- Microsoft
- Oracle
- VM Ware.

Please refer to the BTEC Higher Nationals in Computing and Systems Development section of our website for a full and up-to-date list of included vendor units.

Key features

BTEC Higher Nationals are designed to provide a specialist vocational programme, linked to professional body requirements and National Occupational Standards where appropriate.

They offer a strong, sector-related emphasis on practical skills development alongside the development of requisite knowledge and understanding.

The qualifications provide a thorough grounding in the key concepts and practical skills required in their sector and their national recognition by employers allows direct progression to employment.

A key progression path for BTEC HNC and HND learners is to the second or third year of a degree or honours degree programme, depending on the match of the BTEC Higher National units to the degree programme in question.

The Pearson BTEC HNC Diploma and HND Diploma in Computing and Systems Development (QCF) offer a progression route to the professional qualifications offered by the British Computer Society (BCS).

BTEC Higher Nationals in Computing and Systems Development have been developed to focus on:

- providing education and training for a range of careers in computing and systems development
- providing opportunities for facilities managers to achieve a nationally recognised Level 4/5 vocationally specific qualification
- providing opportunities for full-time and part-time learners to gain a nationally recognised, vocationally specific qualification to enter employment in computing and systems development or to progress to higher education vocational qualifications such as a full- or part-time degree in computing or a related area

- developing the knowledge, understanding and skills of learners in the field of computing and systems development
- providing opportunities for learners to focus on the development of higher-level skills in a computing and systems development context
- providing opportunities for learners to develop a range of skills and techniques and attributes essential for successful performance in working life.

The qualification meets the needs of the above by:

- equipping learners with knowledge, understanding and skills for success in employment in the computing industry
- enabling progression to an undergraduate degree or further professional qualification in computing or a related area
- providing opportunities for specialist study relevant to individual vocations and contexts
- supporting individuals employed or entering employment in the computing industry
- developing the learner's ability in the computing industry through effective use and combination of the knowledge and skills gained in different parts of the programme
- developing a range of skills and techniques, personal qualities and attributes essential for successful performance in working life and thereby enabling earners to make an immediate contribution to employment
- providing flexibility, knowledge, skills and motivation as a basis for future studies and career development in computing and systems development.

Links to National Occupational Standards are indicated in *Annexes A* and *B*.

Progression from the BTEC Level 4 HNC Diploma

The Pearson BTEC Level 4 HNC Diploma in Computing and Systems Development (QCF) provides a specialist work-related programme of study that covers the key knowledge, understanding and practical skills required in the computing sector and also offers particular specialist emphasis through the choice of specialist units.

BTEC Level 4 HNCs provide a nationally recognised qualification offering career progression and professional development for those already in employment and opportunities to progress into higher education. The qualifications are primarily undertaken by part-time learners studying over two years. In some sectors there are opportunities for those wishing to complete an intensive programme of study in a shorter period of time.

This specification gives centres a framework to develop engaging programmes for higher education learners who are clear about the area of employment that they wish to enter.

The Pearson BTEC Level 4 HNC Diploma in Computing and Systems Development (QCF) offers a progression route for learners who are employed in the IT and computing sectors.

Learners studying the BTEC Level 4 HNC Diploma will be able to progress to the workplace or to a BTEC Level 5 HND Diploma or a degree programme.

Progression from the BTEC Level 5 HND Diploma

The Pearson BTEC Level 5 HND Diploma in Computing and Systems Development (QCF) provides greater breadth and specialisation than the BTEC Level 4 HNC Diploma. BTEC HNDs are followed predominately by full-time learners. They allow progression into or within employment in the IT and computing sectors, either directly on achievement of the award or following further study to degree level.

The Pearson BTEC Level 5 HND Diploma in Computing and Systems Development (QCF) provides opportunities for learners to apply their knowledge and practical skills in the workplace. Full-time learners have the opportunity to do this through formal work placements or part-time employment experience.

The qualification prepares learners for employment in the IT and computing sectors and will be suitable for learners who have already decided that they wish to enter this area of work. Some adult learners may wish to make the commitment required by this qualification in order to enter a specialist area of employment in IT and computing sectors or progress into higher education. Other learners may want to extend the specialism that they followed on the BTEC Level 4 HNC Diploma programme.

Progression from this qualification may well be into or within employment in the IT and computing sectors where learners may work towards membership of the British Computer Society.

The Pearson BTEC Level 5 HND Diploma in Computing and Systems Development (QCF) offers a progression route for learners to a number of roles in the IT and computing sectors. General specialists can enter system management, while ICT system support specialists can install or manage IT networks. Learners focusing on software development can enter the many jobs available in that area. The BTEC Level 5 HND Diploma will also enable learners to progress on to further study such

as a degree or a Professional Development Qualification or vendor qualifications offered by Cisco, Microsoft, IBM, CompTIA, Oracle and VM Ware.

National Occupational Standards

Pearson BTEC Higher Nationals in Computing and Systems Development (QCF) are designed to relate to the National Occupational Standards in the IT and Telecoms Professionals sector at level 4 and 5, which in turn form the basis of the IT National Vocational Qualifications (NVQs). BTEC Higher Nationals do not purport to deliver occupational competence in the sector, which should be demonstrated in a work context. However, the qualifications provide underpinning knowledge for the National Occupational Standards, as well as developing practical skills in preparation for work and possible achievement of NVQs in due course. For further details of the IT and Telecoms Professionals National Occupational Standards go to www.e-skills.com.

Qualification Frameworks for Higher National Diplomas

In England, Wales and Northern Ireland, BTEC HNC and HND Diplomas may either be awarded by degree-awarding bodies under a licence from Pearson (which allows them to devise, deliver and award Higher National qualifications themselves), or they may be awarded directly by Pearson, as an awarding body regulated by Ofqual. The majority of BTEC HNC and HND Diplomas are awarded by Pearson. Only those HNC and HND Diplomas that are awarded by degree-awarding bodies are included on the Framework for Higher Education Qualifications (FHEQ) (because this framework comprises qualifications awarded by degree-awarding bodies.) BTEC HNC and HND Diplomas awarded directly by Pearson are regulated qualifications at Level 4 and Level 5 on the Qualifications and Credit Framework (QCF) and the Credit and Qualifications Framework for Wales (CQFW) and are subject to the academic standards and regulations of Pearson and the requirements of the QCF and CQFW.

The QCF level descriptors have been used to describe the relative intellectual demand, complexity, depth of learning and learner autonomy associated with the level 4 or 5 level of learning and achievement.

QAA subject and qualification benchmark statements have been used to provide points of reference for each level.

Employers and higher education providers can expect that typical learners studying for the Pearson BTEC Level 5 HND Diploma in Computing and Systems Development (QCF) should have developed certain higher level skills and abilities and studied a mandatory curriculum and selected optional specialist units. This detail is contained in the 'Qualification Requirements' in *Annexe A* of this specification.

Teaching, learning and assessment

Learners must achieve a minimum of 120 credits (of which at least 65 must be at level 4) on their programme of learning to be awarded a BTEC Level 4 HNC and a minimum of 240 credits (of which at least 125 must be at level 5 or above) to be awarded a BTEC Level 5 HND.

The assessment of BTEC Higher National qualifications is criterion-referenced and centres are required to assess learners' evidence against published learning outcomes and assessment criteria.

All units will be individually graded as 'pass', 'merit' or 'distinction'. To achieve a pass grade for the unit learners must meet the assessment criteria set out in the specifications. This gives transparency to the assessment process and provides for the establishment of national standards for each qualification.

The units in BTEC Higher National qualifications all have a standard format which is designed to provide guidance on the requirements of the qualification for learners, assessors and those responsible for monitoring national standards.

Unit format

Each unit is set out in the following way.

Unit title, unit code, QCF level and credit value.

The unit title is accredited on the QCF and this form of words will appear on the learner's Notification of Performance.

Each unit is assigned a level, indicating the relative intellectual demand, complexity and depth of study, and learner autonomy. All units and qualifications within the QCF will have a level assigned to them, which represents the level of achievement. There are nine levels of achievement, from Entry level to level 8. The level of the unit has been informed by the QCF level descriptors and, where appropriate, the National Occupational Standards (NOS) and/or other sector/professional benchmarks.

Each unit in BTEC Higher National qualifications has a credit value which specifies the number of credits that will be awarded to a learner who has achieved all the learning outcomes of the unit. Learners will be awarded credits for the successful completion of whole units.

Aim

The aim provides a clear summary of the purpose of the unit and is a succinct statement that summarises the learning outcomes of the unit.

Unit abstract

The unit abstract gives the reader an appreciation of the unit in the vocational setting of the qualification, as well as highlighting the focus of the unit. It gives the reader a snapshot of the unit and the key knowledge, skills and understanding gained while studying the unit. The unit abstract also highlights any links to the appropriate vocational sector by describing how the unit relates to that sector.

Learning outcomes

The learning outcomes identify what each learner must do in order to pass the unit. Learning outcomes state exactly what a learner should 'know, understand or be able to do' as a result of completing the unit. Learners must achieve all the learning outcomes in order to pass the unit.

Unit content

The unit content identifies the breadth of knowledge, skills and understanding needed to design and deliver a programme of learning to achieve each of the learning outcomes. This is informed by the underpinning knowledge and understanding requirements of relevant National Occupational Standards (NOS) where appropriate.

Each learning outcome is stated in full and then the key phrases or concepts related to that learning outcome are listed in italics followed by the subsequent range of related topics.

The information below shows how unit content is structured and gives the terminology used to explain the different components within the content.

- Learning outcome: this is given in bold at the beginning of each section of content.
- Italicised sub-heading: it contains a key phrase or concept. This is content which must be covered in the delivery of the unit. Colons mark the end of an italicised sub-heading.
- Elements of content: the elements are in roman text and amplify the sub-heading. The elements must also be covered in the delivery of the unit. Semi-colons mark the end of an element.
- Brackets contain amplification of elements of content which must be covered in the delivery of the unit.
- 'e.g.' is a list of examples used for indicative amplification of an element (that is, the content specified in this amplification that could be covered or that could be replaced by other, similar material).

It is not a requirement of the unit specification that all of the content is assessed.

Learning outcomes and assessment criteria

Each unit contains statements of the evidence that each learner should produce in order to receive a pass.

Guidance

This section provides additional guidance and amplification related to the unit to support tutors/deliverers and assessors. Its subsections are given below.

- *Links* – sets out possible links between units within the specification. Provides opportunities for the integration of learning, delivery and assessment. Links to relevant National Occupational Standards and Professional Bodies Standards will be highlighted here.
- *Essential requirements* – essential, unique physical and/or staffing resources or delivery/assessment requirements needed for the delivery of this unit are specified here.
- *Employer engagement and vocational contexts* – this is an optional section. Where relevant it offers suggestions for employer contact to enhance the delivery of the unit.

These subsections should be read in conjunction with the learning outcomes, unit content, assessment criteria and the generic grade descriptors.

The centre will be asked to ensure that essential resources are in place when it seeks approval from Pearson to offer the qualification.

Learning and assessment

The purpose of assessment is to ensure that effective learning has taken place of the content of each unit. Evidence of this learning, or the application of the learning, is required for each unit. The assessment of the evidence relates directly to the assessment criteria for each unit, supported by the generic grade descriptors.

The process of assessment can aid effective learning by seeking and interpreting evidence to decide the stage that learners have reached in their learning, what further learning needs to take place and how best to do this. Therefore, the process of assessment should be part of the effective planning of teaching and learning by providing opportunities for both the learner and assessor to obtain information about progress towards learning goals.

The assessor and learner must be actively engaged in promoting a common understanding of the assessment criteria and the grade descriptors (what it is they are trying to achieve and how well they achieve it) for further learning to take place. Therefore, learners need constructive feedback and guidance about how they may improve by capitalising on their strengths and clear and constructive comments about their weaknesses and how these might be addressed.

Assessment instruments are constructed within centres. They should collectively ensure coverage of all assessment criteria within each unit and should provide opportunities for the evidencing of all the grade descriptors.

It is advised that assessment criteria and contextualised grade descriptors are clearly indicated on each assessment instrument to provide a focus for learners (for transparency and to ensure that feedback is specific to the criteria) and to assist with internal standardisation processes. Tasks/activities should enable learners to produce evidence that relates directly to the assessment criteria and grade descriptors.

When centres are designing assessment instruments, they need to ensure that the instruments are valid, reliable and fit for purpose, building on the application of the assessment criteria. Centres are encouraged to place emphasis on practical application of the assessment criteria, providing a realistic scenario for learners to adopt, making maximum use of work-related practical experience and reflecting typical practice in the sector concerned. **The creation of assessment instruments that are fit for purpose is vital to achievement.**

Grading Higher National units

The grading of BTEC Higher National qualifications is at the unit and the qualification level.

Each successfully completed unit will be graded as a pass, merit or distinction.

A pass is awarded for the achievement of all outcomes against the specified assessment criteria.

Merit and distinction grades are awarded for higher-level achievement. The generic merit and distinction grade descriptors listed in *Annexe C* are for grading the total evidence produced for each unit and describe the learner's performance over and above that for a pass grade.

Each of the generic merit and distinction grade descriptors should be amplified by use of **indicative characteristics** which exemplify the merit and distinction grade descriptors. These give a guide to the expected learner performance, and support the generic grade descriptors. The indicative characteristics should reflect the nature of a unit and the context of the sector programme.

The indicative characteristics shown in the table for each of the generic grade descriptors in *Annexe C* **are not exhaustive**. Consequently, centres should select appropriate characteristics from the list **or construct others** that are appropriate for their sector programme and level.

It is important to note that each assessment activity does not need to incorporate all the merit and/or distinction grade descriptors.

Contextualising the generic grade descriptors

The generic merit and distinction grade descriptors need to be viewed as a qualitative extension of the assessment criteria for pass within each individual unit. The relevant generic grade descriptors must be identified and specified within an assignment and the relevant indicative characteristics should be used to place the required evidence in context.

Additional guidance on contextualisation of grade descriptors can be found in HN Delivery Guides on the website.

Summary of grades

In order to achieve a **pass** in a unit	• all learning outcomes and associated assessment criteria have been met
In order to achieve a **merit** in a unit	• pass requirements achieved • all merit grade descriptors achieved and all prescribed indicative characteristics.
In order to achieve a **distinction** in a unit	• pass and merit requirements achieved • all distinction grade descriptors achieved and all prescribed indicative characteristics.

Calculation of the qualification grade

Pass qualification grade

Learners who achieve the minimum eligible credit value specified by the rule of combination will achieve the qualification at a pass grade (see section *Rules of combination for the BTEC Level 4 and 5 Higher National qualifications*). The Rules of combination have been summarised below:

BTEC HNC Diplomas

To achieve the qualification a learner must:

- achieve at least 120 credits at or above the level of the qualification (a maximum of 55 credits may be at Level 5)
- achieve a minimum of 65 credits at Level 4
- complete a valid combination of units.

BTEC HND Diplomas

To achieve the qualification a learner must:

- achieve at least 240 credits at or above the level of the qualification
- achieve a minimum of 125 credits at Level 5 or above.

The best valid combination of units is used to calculate the overall grade, e.g. if a learner has completed more than the minimum number of optional units at the appropriate level the best performance from these will be used.

All learners will receive a Notification of Performance showing all unit grades whether or not they were included in the calculation for the overall grade.

Qualification grades above pass grade

BTEC HNC Diplomas

Calculation of the BTEC HND qualification grade is based on the learner's best performance in units at or above the level of the qualification to the value of 75 credits:

- The best 75 credits must come from a maximum of 120 credits as a valid rule of combination
- The units from which the best 75 credits are selected come from the whole qualification including the mandatory core credit.

This means that credit from some mandatory core units is likely to form part of the best 75 credits in most programmes (the mandatory core credit units will automatically be included in the calculation once the maximum amount of credit for optional specialist units for the rule of combination is used up.)

It is the responsibility of a centre to ensure that a correct unit combination is adhered to.

Qualification grades

Learners will be awarded a pass, merit or distinction qualification grade using the points gained through the 75 best credits based on unit achievement.

Unit credit points available for specified unit grades, for either Level 4 or Level 5 units

Unit points per credit		
Pass	**Merit**	**Distinction**
0	1	2
Example for level 4 or level 5 unit of 15 credits		
Pass	**Merit**	**Distinction**
0	15	30

BTEC Level 4 HNC overall qualification grades

Points range	Grade	
0–74	Pass	P
75–149	Merit	M
150	Distinction	D

BTEC HND Diplomas

The grade achieved in units from an appropriate HNC may contribute to an HND grade.

If a learner moves from HNC to HND, credits at Level 5 or above from both the HNC and HND can contribute to the best 75 credits of the overall HND grade. Note that for HND learners, level 4 units do not count towards the qualification grade.

Calculation of the BTEC HND qualification grade is based on the learner's best performance in units at or above the level of the qualification – i.e. **only units at level 5** can be counted towards the value of 75 credits:

- The best 75 credits must come from a maximum of 240 credits as a valid rule of combination
- The units from which the 75 best credits are selected come from the whole qualification including the mandatory core credit, but must be level 5 units or above.

This means that credit from some mandatory core units is likely to form part of the best 75 credits in most programmes (the mandatory core credit units will automatically be included in the calculation once the maximum amount of credit for optional specialist units for the rule of combination is used up.)

It is the responsibility of a centre to ensure that a correct unit combination is adhered to.

Qualification grades

Learners will be awarded a pass, merit or distinction qualification grade using the points gained through the 75 best credits based on unit achievement.

Unit credit points for specified unit grades at Level 5 only

Unit points per credit		
Pass	**Merit**	**Distinction**
0	1	2

BTEC Level 5 HND overall qualification grades

Points range	**Grade**	
0–74	Pass	P
75–149	Merit	M
150	Distinction	D

Annexe E gives examples of how qualification grades are calculated.

Recognition of Prior Learning

Recognition of Prior Learning (RPL) is a method of assessment (leading to the award of credit) that considers whether a learner can demonstrate that they can meet the assessment requirements for a unit through knowledge, understanding or skills they already possess and so do not need to develop through a course of learning.

Pearson encourages centres to recognise learners' previous achievements and experiences whether at work, home and at leisure, as well as in the classroom. RPL provides a route for the recognition of the achievements resulting from continuous learning.

RPL enables recognition of achievement from a range of activities using any valid assessment methodology. If the assessment requirements of a given unit or qualification have been met, the use of RPL is acceptable for accrediting a unit, units or a whole qualification. Evidence of learning must be sufficient, reliable and valid.

For full guidance about Pearson's policy on RPL, please see our *Recognition of Prior Learning Policy and Process* on our website.

Quality assurance of BTEC Higher Nationals

Pearson's quality assurance system for all BTEC higher-level programmes on the QCF at Levels 4–7 will ensure that centres have effective quality assurance processes to review programme delivery. It will also ensure that the outcomes of assessment are to national standards.

The quality assurance process for centres offering BTEC higher-level programmes on the QCF at Levels 4–7 comprises three key components.

1) Approval process

Centres new to the delivery of this programme will be required to seek approval through the existing qualification and centre approval process. Prior to approval being given, centres will be required to submit evidence to demonstrate that they:

- have the human and physical resources required for effective delivery and assessment
- understand the implications for independent assessment and agree to abide by these
- have a robust internal assessment system supported by 'fit for purpose' assessment documentation
- have a system to internally verify assessment decisions, to ensure standardised assessment decisions are made across all assessors and sites.

Such applications have to be supported by the head of the centre (principal, chief executive etc) and include a declaration that the centre will operate the programmes strictly as approved and in line with Pearson requirements.

2) Monitoring of internal centre systems

Centres will be required to demonstrate ongoing fulfilment of the centre approval criteria over time and across all programmes. The process that assures this is external examination, which is undertaken by External Examiners. Centres will be given the opportunity to present evidence of the ongoing suitability and deployment of their systems to carry out the required functions. This includes the consistent application of policies affecting learner registrations, appeals, effective internal examination and standardisation processes. Where appropriate, centres may present evidence of their operation within a recognised code of practice, such as that of the Quality Assurance Agency for Higher Education. Pearson reserves the right to confirm independently that these arrangements are operating to Pearson's satisfaction.

Pearson will affirm, or not, the ongoing effectiveness of such systems. Where system failures are identified, sanctions (appropriate to the nature of the problem) will be applied in order to assist the centre in correcting the problem.

3) Independent assessment review

The internal assessment outcomes reached for all BTEC higher-level programmes on the Qualifications and Credit Framework at Levels 4-7 are subject to an independent assessment review by a Pearson-appointed External Examiner.

The outcomes of this process will be to:

- confirm that internal assessment is to national standards and allow certification

or

- make recommendations to improve the quality of assessment outcomes before certification is released

or

- make recommendations about the centre's ability to continue to be approved for the qualifications in question.

Additional arrangement for ALL centres

Regardless of the type of centre, Pearson reserves the right to withdraw either qualification or centre approval when it deems there is an irreversible breakdown in the centre's ability either to quality assure its programme delivery or its assessment standards.

Programme design and delivery

BTEC Higher National qualifications consist of mandatory core units and specialist units. The specialist units are designed to provide a specific focus to the qualification. Required combinations of specialist units are clearly set out in relation to each qualification in the defined qualification structures provided in this document.

In the BTEC Higher National qualifications each unit's credit value usually consists of multiples of 5 credits. Most units are 15 credits in value. These units have been designed from a learning time perspective. **Each 15-credit unit approximates to a learning time of 150 hours**.

It is expected that these BTEC Level 5 HNDs, accredited onto the Qualifications and Credit Framework (QCF), will also require approximately 960 guided learning hours (GLH).

Consequently, using the above approach, the BTEC Level 4 HNCs, are half the size of the BTEC Level 5 Higher National Diplomas which will require approximately 480 GLH.

Within the information relating to these units on the QCF, each 15-credit unit has been allocated a figure of 60 GLH to help guide centres (other units with smaller or larger credit values have figures calculated on a pro rata basis). Centres delivering these qualifications are required to use their professional expertise in their design and delivery within the overall guided learning hours for the qualification.

Guided learning hours are defined as all the time when a tutor, trainer or facilitator is present to give specific guidance towards the learning aim being studied on a programme. This definition includes lectures, tutorials and supervised study in, for example, open learning centres and learning workshops.

Learning time is defined as the time taken by learners at the level of the unit, on average, to complete the learning outcomes of the unit to the standard determined by the assessment criteria. It should address all learning (including assessment) relevant to the learning outcomes, regardless of where, when and how the learning has taken place. It does not include time spent by staff in day-to-day marking of assignments where the learner is not present.

Centres are advised to consider this definition when planning the programme of study associated with this specification.

Annexe D provides information for centres and learners who wish to compare, for teaching and learning purposes, the units of the Pearson Level 5 BTEC Higher Nationals in Computing and Systems Development (NQF) with the new units of the Pearson BTEC Higher Nationals in Computing and Systems Development (QCF).

Mode of delivery

Pearson does not define the mode of study for BTEC Higher National qualifications. Centres are free to offer the qualification(s) using any mode of delivery that meets the needs of their learners. This may be through traditional classroom teaching, open learning, distance learning or a combination of these. Whatever mode of delivery is used, centres must ensure that learners have appropriate access to the resources identified in the specification and to the subject specialists delivering the units. This is particularly important for learners studying for the qualification through open or distance learning.

Our 'Distance Learning' and 'Distance Assessment' policies are given on our website.

Learners studying for the qualification on a part-time basis bring with them a wealth of experience that should be utilised to maximum effect by tutors and assessors. Assessment instruments based on learners' work environments should be encouraged. Those planning the programme should aim to enhance the vocational nature of the BTEC Higher National qualification by:

- liaising with employers to ensure that the course is relevant to learners' specific needs
- accessing and using non-confidential data and documents from learners' workplaces
- including sponsoring employers in the delivery of the programme and, where appropriate, in the assessment
- linking with company-based/workplace training programmes
- making full use of the variety of experiences of work and life that learners bring to the programme.

Resources

BTEC Higher National qualifications are designed to prepare learners for employment in specific industry sectors.

Physical resources need to support the delivery of the programme and the proper assessment of the outcomes and, therefore, should normally be of industry standard.

Staff delivering programmes and conducting the assessments should be familiar with current practice, legislation and standards used in the sector concerned.

Centres will need to meet any specialist resource requirements when they seek approval from Pearson.

Please refer to the *Essential requirements* section in individual units for specialist resource requirements.

Delivery approach

It is important that centres develop an approach to teaching and learning that supports the specialist vocational nature of the BTEC Higher National qualification. Specifications contain a balance of practical skill development and knowledge requirements, some of which can be theoretical in nature. Tutors and assessors need to ensure that appropriate links are made between theory and practice and that the knowledge base is applied to the sector. This will require the development of relevant and up-to-date teaching materials that allow learners to apply their learning to actual events and activities within the sector. Maximum use should be made of the learner's experience.

Meeting local needs

Centres should note that the qualifications set out in these specifications have been developed in consultation with centres, employers and relevant professional organisations.

The units are designed to meet the skill needs of the sector and the specialist units allow coverage of the full range of employment within the sector. Centres should make maximum use of the choice available to them within the specialist units to meet the needs of their learners, as well as the local skills and training needs.

Where centres identify a specific need that cannot be addressed using the units in this specification, centres can seek approval from Pearson to use units from other BTEC Higher National qualifications on the QCF. Centres will need to justify the need for importing units from other specifications and Pearson will ensure that the vocational focus of the qualification remains the same.

Applications must be made **in advance** of delivery by 31 January in the year of registration (see the website for details).

The flexibility to import standard units from other QCF BTEC Higher National specifications is **limited to a maximum of 30 credits in a BTEC HNC qualification and a maximum of 60 credits only in any BTEC HND qualification**. This is an overall maximum and centres should check the 'Rules of Combination' information for the specific qualification to confirm the actual requirements. These units cannot be used at the expense of the mandatory core units in any qualification nor can the qualification rules of combination level rules be compromised. The centre must ensure that approved units are used only in eligible combinations.

Access and recruitment

Pearson's policy regarding access to our qualifications is that:

- qualifications should be available to everyone who is capable of reaching the required standards
- qualifications should be free from any barriers that restrict access and progression
- there must be equal opportunities for everyone wishing to access the qualification.

Centres are required to recruit learners to BTEC Higher National qualifications with integrity. This will include ensuring that applicants have appropriate information and advice about the qualifications and that the qualification will meet their needs. Centres should take appropriate steps to assess each applicant's potential and make a professional judgement about their ability to successfully complete the programme of study and achieve the qualification. This assessment will need to take account of the support available to the learner within the centre during their programme of study and any specific support that might be necessary to allow the learner to access the assessment for the qualification.

Centres will need to review the profile of qualifications and/or experience held by applicants, considering whether this profile shows an ability to progress to level 4 or level 5 qualifications. For learners who have recently been in education, the entry profile is likely to include one of the following:

- a BTEC Level 3 qualification in IT
- a GCE level profile that demonstrates strong performance in a relevant subject or an adequate performance in more than one GCE subject. This profile is likely to be supported by GCSE grades at A* to C
- other related level 3 qualifications
- an Access to Higher Education Certificate received from an approved further education institution
- related work experience.

Mature learners may present a more varied profile of achievement that is likely to include extensive work experience (paid and/or unpaid) and/or achievement of a range of professional qualifications in their work sector.

Restrictions on learner entry

The BTEC Higher National qualifications are accredited on the QCF for learners in the following age groups:

- 16-18 years old
- 18 years and older.

Equality Act 2010 and Pearson equality policy

Equality and fairness are central to our work. Our equality policy requires all learners to have equal opportunity to access our qualifications and assessments, and our qualifications are required to be 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 qualifications , disadvantaged in comparison with learners who do not share that characteristic
- all learners achieve the recognition they deserve for undertaking a qualification and that this achievement can be compared fairly to the achievement of their peers.

You can find details on how to make adjustments for learners with protected characteristics in the policy document *Access Arrangements, Reasonable Adjustments and Special Considerations*, available on our website.

An adjustment may not be considered reasonable if it involves unreasonable costs and/or timeframes or affects the security or integrity of the assessment.

There is no duty on awarding organisations to make any adjustment to the Assessment Objectives being tested in an assessment.

English language expectations

Centres delivering BTEC level 4 to 7 programmes are expected to ensure that all learners who are non-native English speakers or who have not studied the final two years of school in English, can demonstrate capability in English at a standard commensurate with:

- IELTS 5.5, with a minimum of 5.0 being awarded on individual sections for a level 4 or 5 qualification
- IELTS 6.5 for a level 6 or 7 qualification

Pearson's Standard Verifiers (EE) will expect centres to demonstrate that their learners meet these expectations.

Professional body contact details

The British Computer Society
First Floor, Block D
North Star House, North Star Avenue
Swindon
SN2 1FA
United Kingdom

Telephone: +44 (0)1793 417417
Website: www.bcs.org

How to obtain National Occupational Standards

The National Occupational Standards for IT and Telecoms Professionals can be obtained from:

e-Skills UK
1 Castle Lane
London
SW1E 6DR

Telephone: +44 (0)207 963 8920
Fax: +44 (0)207 592 9138
Email: info@e-skills.com
Website: www.e-skills.com

Professional development and training

Pearson supports UK and international customers with training related to BTEC qualifications. This support is available through a choice of training options offered on our website at: qualifications.pearson.com/en/support/training-from-pearson-uk

The support we offer focuses on a range of issues, such as:

- planning for the delivery of a new programme
- planning for assessment and grading
- developing effective assignments
- building your team and teamwork skills
- developing learner-centred learning and teaching approaches
- building in effective and efficient quality assurance systems.

The national programme of training we offer is on our website. You can request centre-based training through the website or you can contact one of our advisers in the Training from Pearson UK team via Customer Services to discuss your training needs.

BTEC training and support for the lifetime of the qualifications

Training and networks: our training programme ranges from free introductory events through sector-specific opportunities to detailed training on all aspects of delivery, assignments and assessment. We also host some regional network events to allow you to share your experiences, ideas and best practice with other BTEC colleagues in your region.

Regional support: our team of Curriculum Development Managers and Curriculum Support Consultants, based around the country, are responsible for providing advice and support in centres. They can help you with planning and curriculum developments.

To get in touch with our dedicated support teams please visit our website qualifications.pearson.com/en/support/contact-us

Annexe A

Qualification Requirements

Rationale

The Pearson BTEC Higher Nationals in Computing and Systems Development (QCF) have been developed to focus on:

- providing education and training for a range of careers in computing
- providing opportunities for facilities managers to achieve a nationally recognised Level 4/Level 5 vocationally specific qualification
- providing opportunities for full-time learners to gain a nationally recognised, vocationally specific qualification to enter employment in computing or to progress to higher education vocational qualifications such as a full-time degree in computing or a related area
- developing the knowledge, understanding and skills of learners in the field of computing
- providing opportunities for learners to focus on the development of higher-level skills in a computing context
- providing opportunities for learners to develop a range of skills and techniques and attributes essential for successful performance in working life.

Aims of the qualification

This qualification meets the needs of the above rationale by:

- equipping individuals with knowledge, understanding and skills for success in employment in the computing industry
- enabling progression to an undergraduate degree or further professional qualification in computing or a related area
- providing opportunities for specialist study relevant to individual vocations and contexts
- supporting individuals employed or entering employment in the computing industry
- developing the individual's ability in the computing industry through effective use and combination of the knowledge and skills gained in different parts of the programme
- developing a range of skills and techniques, personal qualities and attributes essential for successful performance in working life and thereby enabling learners to make an immediate contribution to employment
- providing flexibility, knowledge, skills and motivation as a basis for future studies and career development in computing.

Professional body recognition

The Pearson BTEC Higher Nationals in Computing and Systems Development (QCF) have been developed with career progression and recognition by professional bodies in mind. It is essential that learners gain the maximum benefit from their programme of study.

Learners possessing a Pearson HNC/D Diploma in Computing and Systems Development (QCF) and a number of years (usually between 3–5 years) of post HNC/D experience in the IT or computing industry are able to apply for 'Associate Membership of the British Computer Society'.

National Occupational Standards

Pearson BTEC Higher Nationals in Computing and Systems Development (QCF) are designed to relate to the IT and Telecoms Professionals National Occupational Standards in the IT and computing sector. BTEC Higher Nationals do not purport to deliver occupational competence in the sector, which should be demonstrated in a work context. However, the qualifications provide underpinning knowledge for the IT and Telecoms Professionals National Occupational Standards, as well as developing practical skills in preparation for work and possible achievement of Professional Competence qualifications in due course.

Mandatory curriculum

Business Skills for e-Commerce: understand the structure and aims of business organizations, understand the impact of e-Commerce and be able to design e-Commerce solutions.

Computer Systems: understand the function of computer systems, be able to design computer systems, be able to build and configure computer systems and be able to undertake routine maintenance on computer systems.

Employability and Professional Development: be able to take responsibility for own personal and professional development, be able to demonstrate acquired interpersonal and transferable skills, understand the dynamics of working with others and be able to develop strategies for problem solving.

Project Design, Implementation and Evaluation: be able to formulate a project, be able to implement the project within agreed procedures and to specification, be able to evaluate the project outcomes and be able to present the project outcomes.

Higher-level skills and abilities

Learners will be expected to develop the following skills during the programme of study:

- analysing, synthesising and summarising information critically
- the ability to read and use appropriate literature with a full and critical understanding
- the ability to think independently and solve problems
- the ability to take responsibility for their own learning and recognise their own learning style
- obtaining and integrating several lines of subject-specific evidence to formulate and test hypotheses
- applying subject knowledge and understanding to address familiar and unfamiliar problems recognising the moral and ethical issues surrounding computing and IT
- the ability to understand the need for ethical standards and professional codes of conduct when designing, planning, conducting and reporting an investigations
- the ability to undertake investigations of computer systems in a responsible, safe and ethical manner
- an appreciation of the interdisciplinary nature of computing
- the capacity to give a clear and accurate account of a subject, marshal arguments in a mature way and engage in debate and dialogue both with specialists and non-specialists.

Annexe B

National Occupational Standards (NOS)

Mapping against the level 4 NVQ in IT and Telecoms Professionals

The grid below maps the knowledge covered in the level 4 NVQ in IT and Telecoms Professionals against the underpinning knowledge of the Pearson BTEC Higher Nationals in Computing and Systems Development (QCF).

HNC/D titles / NVQ unit titles	Unit 1: Business Skills for e-Commerce	Unit 2: Computer Systems	Unit 5: Emerging Technologies	Unit 6: Management in IT	Unit 9: Systems Analysis and Design	Unit 10: Human Computer Interaction	Unit 13: Multimedia Design and Authoring	Unit 14: Website Design	Unit 15: Website Management	Unit 16: e-Commerce Technologies	Unit 17: Database Design Concepts	Unit 18: Procedural Programming	Unit 19: Object Oriented Programming	Unit 20: Event Driven Programming Solutions	Unit 21: Software Applications Testing	Unit 22: Office Solutions Development	Unit 23: Mathematics for Software Development	Unit 24: Networking Technologies	Unit 25: Routing Concepts	Unit 26: Design a Small or Home Office Network
4.1 Systems Architecture		3																		
4.2 Data Analysis											3									
4.3 Human Needs Analysis			3																	
4.4 Systems Analysis	3				3															
4.5 Data Design																				
4.6 Human Computer Interaction/Interface (HCI) Design						3	3	3												

HNC/D titles / NVQ unit titles	Unit 1: Business Skills for e-Commerce	Unit 2: Computer Systems	Unit 5: Emerging Technologies	Unit 6: Management in IT	Unit 9: Systems Analysis and Design	Unit 10: Human Computer Interaction	Unit 13: Multimedia Design and Authoring	Unit 14: Website Design	Unit 15: Website Management	Unit 16: e-Commerce Technologies	Unit 17: Database Design Concepts	Unit 18: Procedural Programming	Unit 19: Object Oriented Programming	Unit 20: Event Driven Programming Solutions	Unit 21: Software Applications Testing	Unit 22: Office Solutions Development	Unit 23: Mathematics for Software Development	Unit 24: Networking Technologies	Unit 25: Routing Concepts	Unit 26: Design a Small or Home Office Network
4.7 Systems Design	3	3	3																	
4.8 IT/Technology Infrastructure Design and Planning		3								3								3	3	3
5.1 Systems Development	3	3																3	3	3
5.2 Software Development							3	3	3			3	3	3	3		3			
5.3 IT/Technology Solution Testing		3													3					
6.1 Information Management				3																
6.2 IT Security Management																				
6.3 IT Disaster Recovery																				
7.1 IT/Technology Service Operations and Event Management		3							3									3	3	
7.2 IT/Technology Service Helpdesk and Incident Management																				
7.3 IT/Technology Problem Management																				

HNC/D titles / NVQ unit titles	Unit 1: Business Skills for e-Commerce	Unit 2: Computer Systems	Unit 5: Emerging Technologies	Unit 6: Management in IT	Unit 9: Systems Analysis and Design	Unit 10: Human Computer Interaction	Unit 13: Multimedia Design and Authoring	Unit 14: Website Design	Unit 15: Website Management	Unit 16: e-Commerce Technologies	Unit 17: Database Design Concepts	Unit 18: Procedural Programming	Unit 19: Object Oriented Programming	Unit 20: Event Driven Programming Solutions	Unit 21: Software Applications Testing	Unit 22: Office Solutions Development	Unit 23: Mathematics for Software Development	Unit 24: Networking Technologies	Unit 25: Routing Concepts	Unit 26: Design a Small or Home Office Network
7.4 IT Application Management/ Support		3														3				
7.5 IT/Technology Management and Support		3							3									3	3	
7.6 Availability Management																				
7.7 IT/Technology Capacity Management																				
7.8 Change and Release Management	3																		3	
7.9 IT/Technology Service Catalogue and/or Service Level Management, Measurement and Reporting																				
7.10 IT/Technology Asset and Configuration Management																				
7.11 Supplier Management	3																			
7.12 Technical Evaluation		3																		

HNC/D titles / NVQ unit titles	Unit 27: Network Operating Systems	Unit 28: IT Support for End-Users																			
4.1 Systems Architecture																					
4.2 Data Analysis																					
4.3 Human Needs Analysis																					
4.4 Systems Analysis																					
4.5 Data Design																					
4.6 Human Computer Interaction/Interface (HCI) Design																					
4.7 Systems Design																					
4.8 IT/Technology Infrastructure Design and Planning	3																				
5.1 Systems Development																					
5.2 Software Development																					
5.3 IT/Technology Solution Testing																					
6.1 Information Management																					
6.2 IT Security Management																					
6.3 IT Disaster Recovery																					

HNC/D titles / NVQ unit titles	Unit 27: Network Operating Systems	Unit 28: IT Support for End-Users																		
7.1 IT/Technology Service Operations and Event Management	3																			
7.2 IT/Technology Service Helpdesk and Incident Management		3																		
7.3 IT/Technology Problem Management																				
7.4 IT Application Management/ Support	3	3																		
7.5 IT/Technology Management and Support	3	3																		
7.6 Availability Management																				
7.7 IT/Technology Capacity Management																				
7.8 Change and Release Management																				
7.9 IT/Technology Service Catalogue and/or Service Level Management, Measurement and Reporting																				

HNC/D titles / NVQ unit titles	Unit 27: Network Operating Systems	Unit 28: IT Support for End-Users																		
7.10 IT/Technology Asset and Configuration Management																				
7.11 Supplier Management																				
7.12 Technical Evaluation		3																		

National Occupational Standards (NOS)

Mapping against the Level 5 NVQ in IT and Telecoms Professionals

The following grid maps the knowledge covered in the Level 5 NVQ in IT and Telecoms Professionals against the underpinning knowledge of the Pearson BTEC Higher Nationals in Computing and Systems Development (QCF).

HNC/D titles / NVQ unit titles	Unit 29: e-Commerce Strategy	Unit 30: Information Systems in Organisations	Unit 31: Knowledge-based Systems	Unit 32: Quality Systems in IT	Unit 33: Data Analysis and Design	Unit 34: Data Structures and Algorithms	Unit 35: Web Applications Development	Unit 36: Internet Server Management	Unit 39: Computer Games Design and Development	Unit 40: Distributed Software Applications	Unit 41: Programming in Java	Unit 42: Programming in .NET	Unit 43: Networking Infrastructure	Unit 44: Local Area Networking Technologies	Unit 45: Wide Area Networking Technologies	Unit 46: Network Security	Unit 47: IT Virtualisation	Unit 48: IT Security Management	Unit 49: Digital Forensics	
4.1 Systems Architecture																				
4.2 Data Analysis					3															
4.3 Human Needs Analysis			3																	
4.4 Systems Analysis	3		3																	
4.5 Data Design					3	3														
4.6 Human Computer Interaction/Interface (HCI) Design			3				3													
4.7 Systems Design	3																			

HNC/D titles / NVQ unit titles	Unit 29: e-Commerce Strategy	Unit 30: Information Systems in Organisations	Unit 31: Knowledge-based Systems	Unit 32: Quality Systems in IT	Unit 33: Data Analysis and Design	Unit 34: Data Structures and Algorithms	Unit 35: Web Applications Development	Unit 36: Internet Server Management	Unit 39: Computer Games Design and Development	Unit 40: Distributed Software Applications	Unit 41: Programming in Java	Unit 42: Programming in .NET	Unit 43: Networking Infrastructure	Unit 44: Local Area Networking Technologies	Unit 45: Wide Area Networking Technologies	Unit 46: Network Security	Unit 47: IT Virtualisation	Unit 48: IT Security Management	Unit 49: Digital Forensics	
4.8 IT/Technology Infrastructure Design and Planning							3	3					3	3	3					
5.1 Systems Development	3							3					3	3	3					
5.2 Software Development			3			3	3		3	3	3	3								
5.3 IT/Technology Solution Testing																				
6.1 Information Management		3																3		
6.2 IT Security Management								3								3		3	3	
6.3 IT Disaster Recovery																	3	3		
7.1 IT/Technology Service Operations and Event Management								3					3	3	3					
7.2 IT/Technology Service Helpdesk and Incident Management																				
7.3 IT/Technology Problem Management								3												

HNC/D titles / NVQ unit titles	Unit 29: e-Commerce Strategy	Unit 30: Information Systems in Organisations	Unit 31: Knowledge-based Systems	Unit 32: Quality Systems in IT	Unit 33: Data Analysis and Design	Unit 34: Data Structures and Algorithms	Unit 35: Web Applications Development	Unit 36: Internet Server Management	Unit 39: Computer Games Design and Development	Unit 40: Distributed Software Applications	Unit 41: Programming in Java	Unit 42: Programming in .NET	Unit 43: Networking Infrastructure	Unit 44: Local Area Networking Technologies	Unit 45: Wide Area Networking Technologies	Unit 46: Network Security	Unit 47: IT Virtualisation	Unit 48: IT Security Management	Unit 49: Digital Forensics	
7.4 IT Application Management/ Support			3					3												
7.5 IT/Technology Management and Support								3					3	3	3					
7.6 Availability Management																	3			
7.7 IT/Technology Capacity Management																				
7.8 Change and Release Management	3			3									3	3	3					
7.9 IT/Technology Service Catalogue and/or Service Level Management, Measurement and Reporting				3																
7.10 IT/Technology Asset and Configuration Management																				
7.11 Supplier Management	3																			
7.12 Technical Evaluation																				

Annexe C

Grade descriptors

Pass grade

A **pass grade** is achieved by meeting all the requirements defined in the assessment criteria for pass for each unit.

Merit grade

Merit grade descriptors	**Exemplar indicative characteristics** **Centres can identify and use other relevant characteristics. This is NOT a tick list.**
In order to achieve a **merit** the learner must:	The learner's evidence shows for example:
• identify and apply strategies to find appropriate solutions	• effective judgements have been made • complex problems with more than one variable have been explored • an effective approach to study and research has been applied
• select/design and apply appropriate methods/techniques	• relevant theories and techniques have been applied • a range of methods and techniques have been applied • a range of sources of information has been used • the selection of methods and techniques/sources has been justified • the design of methods/techniques has been justified • complex information/data has been synthesised and processed • appropriate learning methods/techniques have been applied
• present and communicate appropriate findings	• the appropriate structure and approach has been used • coherent, logical development of principles/concepts for the intended audience • a range of methods of presentation have been used and technical language has been accurately used • communication has taken place in familiar and unfamiliar contexts • the communication is appropriate for familiar and unfamiliar audiences and appropriate media have been used.

Distinction grade

Distinction grade descriptors	Exemplar indicative characteristics Centres can identify and use other relevant characteristics. This is NOT a tick list.
In order to achieve a **distinction** the learner must:	The learner's evidence shows for example:
• use critical reflection to evaluate own work and justify valid conclusions	• conclusions have been arrived at through synthesis of ideas and have been justified • the validity of results has been evaluated using defined criteria • self-criticism of approach has taken place • realistic improvements have been proposed against defined characteristics for success
• take responsibility for managing and organising activities	• autonomy/independence has been demonstrated • substantial activities, projects or investigations have been planned, managed and organised • activities have been managed • the unforeseen has been accommodated • the importance of interdependence has been recognised and achieved
• demonstrate convergent/lateral/ creative thinking	• ideas have been generated and decisions taken • self-evaluation has taken place • convergent and lateral thinking have been applied • problems have been solved • innovation and creative thought have been applied • receptiveness to new ideas is evident • effective thinking has taken place in unfamiliar contexts.

Annexe D

Unit mapping overview

QCF versions of the BTEC Higher National units in Computing and Systems Development (specification start date 01/09/2010) are mapped against the NQF BTEC Higher National units in Computing (specification end date 31/12/2010), in the following tables:

Unit	QCF Unit title	Maps to NQF unit number	Level of similarity between units
1	Business Skills for e-Commerce	25	F
2	Computer Systems	1	P
3	Employability and Professional Development	6	N
		28	
4	Project Design, Implementation and Evaluation	8	N
		9	
		10	
		27	
5	Emerging Technologies		N
6	Management in IT	14	F
7	Research Skills		N
8	Management of Projects	23	F
9	Systems Analysis and Design	2	F
10	Human Computer Interaction	22	F
11	Digital Media in Art and Design		N
12	2D, 3D and Time-based Digital Applications		N
13	Multimedia Design and Authoring	18	F
14	Website Design	19	N
15	Website Management		N

KEY

P – Partial mapping (some topics from the old unit appear in the new unit)

F – Full mapping (topics in old unit match new unit exactly or almost exactly)

X – Full mapping + new (all the topics from the old unit appear in the new unit, but new unit also contains new topic(s))

N – New unit

Unit	QCF Unit title	Maps to NQF unit number	Level of similarity between units
16	e-Commerce Technologies	26	N
17	Database Design Concepts	4	F
18	Procedural Programming	3	N
19	Object Oriented Programming	36	N
20	Event Driven Programming Solutions	38	N
		39	
21	Software Applications Testing	40	F
22	Office Solutions Development	17	N
23	Mathematics for Software Development	32	F
24	Networking Technologies	5	N
		9	
		12	
25	Routing Concepts		N
26	Design a Small or Home Office Network		N
27	Network Operating Systems	34	N
28	IT Support for End Users	15	N
29	e-Commerce Strategy	24	F
30	Information Systems in Organisations	16	F
31	Knowledge-based Systems	29	N
32	Quality Systems in IT	7	F
33	Data Analysis and Design	13	F
34	Data Structures and Algorithms	41	F
35	Web Applications Development		N
36	Internet Server Management	20	N
37	Digital Image Creation and Development		N
38	3D Computer Modelling and Animation		N
39	Computer Games Design and Development		N

KEY

P – Partial mapping (some topics from the old unit appear in the new unit)

F – Full mapping (topics in old unit match new unit exactly or almost exactly)

X – Full mapping + new (all the topics from the old unit appear in the new unit, but new unit also contains new topic(s))

N – New unit

Unit	QCF Unit title	Maps to NQF unit number	Level of similarity between units
40	Distributed Software Applications	35	N
41	Programming in Java	30	N
42	Programming in .NET		N
43	Networking Infrastructure	31	N
44	Local Area Networking Technologies		N
45	Wide Area Networking Technologies		N
46	Network Security		N
47	IT Virtualisation		N
48	IT Security Management		N
49	Digital Forensics		N
50	Work-based Experience	21	N
51	Computer Systems Architecture		N
52	Spreadsheet Modelling		N
53	Web Server Scripting		N
54	Multimedia Design		N

KEY

P – Partial mapping (some topics from the old unit appear in the new unit)

F – Full mapping (topics in old unit match new unit exactly or almost exactly)

X – Full mapping + new (all the topics from the old unit appear in the new unit, but new unit also contains new topic(s))

N – New unit

Unit mapping in depth

QCF versions of the Pearson BTEC Higher National units in Computing and Systems Development (QCF) (specification start date 01/09/2010) are mapped against the NQF BTEC Higher National units in Computing (specification end date 31/12/2010).

New QCF units		**NQF units**		**Mapping/comments (new topics in italics)**
Number	**Name**	**Number**	**Name**	
1	Business Skills for e-Commerce	25	e-Business Development	Full mapping.
2	Computer Systems	1	Computer Platforms	Partial mapping. New topics include *Understand the functions of computer systems* and *undertake routine computer maintenance.*
3	Employability and Professional Development	6	Personal Skills Development	These two NQF units have been amalgamated to produce a single new QCF unit with similar topics.
		28	Professional Development	
4	Project Design, Implementation and Evaluation	8	Information Systems Project	A new QCF unit which can be contextualised to meet a wide range of IT specialist fields.
		9	Networking Project	
		10	Software Development Project	
		27	e-Business Project	
5	Emerging Technologies			A new QCF unit.
6	Management in IT	14	Management in IT	Full mapping.
7	Research Skills			A new QCF unit.
8	Management of Projects	23	Project Management	Full mapping.

New QCF units		NQF units		Mapping/comments (new topics in italics)
Number	**Name**	**Number**	**Name**	
9	Systems Analysis and Design	2	Systems Analysis	Full mapping with the addition of *understanding the importance of a feasibility study.*
10	Human Computer Interaction	22	Human Computer Interface	Full mapping (less one learning outcome).
11	Digital Media in Art and Design			A new QCF unit.
12	2D, 3D and Time-based Digital Applications			A new QCF unit.
13	Multimedia Design and Authoring	18	Multimedia Design and Authoring	Full mapping.
14	Website Design	19	Website Design	A new QCF unit.
15	Website Management			A new QCF unit.
16	e-Commerce Technologies	26	e-Business Technology	A new QCF unit.
17	Database Design Concepts	4	Database Design Concepts	Full mapping.
18	Procedural Programming	3	Programming Concepts	A new QCF unit.
19	Object Oriented Programming	36	OOP Programming	A new QCF unit.
20	Event Driven Programming Solutions	38	Visual Programming Development	A new QCF unit.
		39	Visual Programming Fundamentals	

New QCF units		NQF units		Mapping/comments (new topics in italics)
Number	**Name**	**Number**	**Name**	
21	Software Applications Testing	40	Software Testing	Full mapping.
22	Office Solutions Development	17	MS Office Solution Development	A new QCF unit.
23	Mathematics for Software Development	32	Maths for Software Development	Full mapping.
24	Networking Technologies	5	Networking Concepts	A new QCF unit.
		9	Networking Projects	
		12	Networking Technology	
25	Routing Concepts			A new QCF unit.
26	Design a Small or Home Office Network			A new QCF unit.
27	Network Operating Systems	34	Supporting NOS and OS	A new QCF unit.
28	IT Support for End Users	15	End User Support	A new QCF unit.
29	e-Commerce Strategy	24	e-Business Strategy	Full mapping.
30	Information Systems in Organisations	16	Information Systems	Full mapping.
31	Knowledge-based Systems	29	Knowledge Systems	A new QCF unit.
32	Quality Systems in IT	7	Quality Systems	Full mapping.

New QCF units		NQF units		Mapping/comments (new topics in italics)
Number	**Name**	**Number**	**Name**	
33	Data Analysis and Design	13	Data Analysis and Design	Full mapping.
34	Data Structures and Algorithms	41	Data Structures and Algorithms	Full mapping.
35	Web Applications Development			A new QCF unit.
36	Internet Server Management	20	Internet Server Management	A new QCF unit.
37	Digital Image Creation and Development			A new QCF unit.
38	3D Computer Modelling and Animation			A new QCF unit.
39	Computer Games Design and Development			A new QCF unit.
40	Distributed Software Applications	35	Distributed Design and Development	A new QCF unit.
41	Programming in Java	30	Java Programming	A new QCF unit.
42	Programming in .NET			A new QCF unit.
43	Networking Infrastructure	31	Networking Infrastructure	A new QCF unit.
44	Local Area Networking Technologies			A new QCF unit.
45	Wide Area Networking Technologies			A new QCF unit.
46	Network Security			A new QCF unit.

New QCF units		NQF units		Mapping/comments (new topics in italics)
Number	**Name**	**Number**	**Name**	
47	IT Virtualisation			A new QCF unit.
48	IT Security Management			A new QCF unit.
49	Digital Forensics			A new QCF unit.
50	Work-based Experience	21	Work Experience	A new QCF unit.
51	Computer Systems Architecture			A new QCF unit.
52	Spreadsheet Modelling			A new QCF unit.
53	Web Server Scripting			A new QCF unit.
54	Multimedia Design			A new QCF unit.

Annexe E

Calculation of the qualification grade

Pass qualification grade

Learners who achieve the minimum eligible credit value specified by the rule of combination will achieve the qualification at pass grade (see section *Rules of combination for BTEC Levels 4 and 5 Higher National qualifications*).

Qualification grades above pass grade

Learners will be awarded a merit or distinction qualification grade by the aggregation of points gained through the successful achievement of individual units. **The graded section of both qualifications is based on the learner's best performance in units at the level or above of the qualification to the value of 75 credits.**

The number of points available is dependent on the unit grade achieved and the credit size of the unit (as shown in the table below).

Points available per credit at specified unit grades

Points per credit		
Pass	Merit	Distinction
0	1	2

So a 15 credit unit awarded a merit grade will gain 15 points.

Qualification grades

BTEC Level 4 HNC

Points range	Grade	
0-74	Pass	P
75-149	Merit	M
150	Distinction	D

BTEC Level 5 HND

Points range	Grade	
0-74	Pass	P
75-149	Merit	M
150	Distinction	D

These are some examples of how the HNC Diploma grades are calculated:

Example 1: Achievement of a BTEC HNC Diploma with Pass grade

		Level	Credit	Grade	Grade points	Points per unit (weighting × credit points)
Unit 1	Mandatory core unit	4	15	P	0	
Unit 2	Mandatory core unit	4	15	P	0	
Unit 3	Mandatory core unit	4	15	M	1	15
Unit 4	Mandatory core unit	4	15	M	1	15
Unit 15	Specialist unit	5	15	P	0	
Unit 17	Specialist unit	5	15	P	0	
Unit 18	Specialist unit	4	15	M	1	15
Unit 12	Specialist unit	4	15	M	1	15
Unit 14	Specialist unit	4	10	D	2	20
	Qualification total requirement 120		**130**			**60**

Unit 14 is not included as it is an additional unit on top of the 120 credit qualification

The learner can only include the points from the best 75 out of 120 credits in a valid combination.

Example 2: Achievement of a BTEC HNC Diploma with Merit grade

		Level	Credit	Grade	Grade points	Points per unit (weighting × credit points)
Unit 1	Mandatory core unit	4	15	M	1	15
Unit 2	Mandatory core unit	4	15	P	0	
Unit 3	Mandatory core unit	4	15	M	1	15
Unit 4	Mandatory core unit	4	15	P	0	
Unit 15	Specialist unit	5	15	P	0	
Unit 9	Specialist unit	4	15	M	1	15
Unit 18	Specialist unit	4	15	M	1	15
Unit 12	specialist unit	4	15	M	1	15
	Qualification total requirement 120		**120**			**75**

The best 75 credits include both core and optional units.

The learner has sufficient points for a merit.

Example 3: Achievement of an HNC Diploma with Distinction grade

		Level	Credit	Grade	Grade points	Points per unit (weighting × credit points)
Unit 1	Mandatory core unit	4	15	M	1	(15)
Unit 2	Mandatory core unit	4	15	P	0	
Unit 3	Mandatory core unit	4	15	D	2	30
Unit 4	Mandatory core unit	4	15	P	0	
Unit 15	Specialist unit	4	15	D	2	30
Unit 17	Specialist unit	4	15	D	2	30
Unit 9	Specialist unit	4	15	D	2	30
Unit 12	Specialist unit	4	15	D	2	30
	Qualification total requirement- 120		**120**			**150**

The learner has grade points in more than 75 credits. The best performance is used to calculate the grade.

These can be level 4/5 for the HNC

The learner has enough points for a Distinction from 75 credits.

Examples for the HND Diploma:

The tables below give examples of how the overall grade is determined.

Only points from units at or above the level of the qualification can be counted towards the grade.

Examples used are for illustrative purposes only. Other unit combinations are possible.

Example 1: Achievement of an HND Diploma with a pass grade

		Level	Credit	Grade	Grade points	Points per unit (weighting × credit points)
Unit 1	Mandatory core unit	4	15	P	X	(15)
Unit 2	Mandatory core unit	4	15	M	X	
Unit 3	Mandatory core unit	4	15	M	X	30
Unit 4	Mandatory core unit	4	15	M	X	
Unit 5	Mandatory core unit	4	15	M	X	
Unit 6	Mandatory core unit	5	15	P	0	
Unit 7	Mandatory core unit	5	15	M	1	15
Unit 8	Mandatory core unit	5	20	P	0	
Unit 20	Specialist unit	5	15	M	1	15
Unit 21	Specialist unit	5	15	P	0	
Unit 23	Specialist unit	5	15	P	0	
Unit 25	Specialist unit	4	15	P	X	
Unit 26	Specialist unit	5	15	M	1	15
Unit 29	Specialist unit	4	15	M	X	
Unit 33	Specialist unit	4	15	M	X	
Unit 35	Specialist unit	5	15	M	1	15
	Qualification grade totals	**Min 125 at level 5**	**245**			**60**

Count the points from level 5 units for the best 75 credits

X these units are **below** the level of the HND Diploma so not counted for grading

The learner has sufficient points for a pass grade.

Example 2

Achievement of an HND Diploma with a Merit grade

		Level	Credit	Grade	Grade points	Points per unit (weighting × credit points)
Unit 1	Mandatory core unit	4	15	P	X	
Unit 2	Mandatory core unit	4	15	M	X	
Unit 3	Mandatory core unit	4	15	M	X	
Unit 4	Mandatory core unit	4	15	M	X	
Unit 5	Mandatory core unit	4	15	M	X	
Unit 6	Mandatory core unit	5	15	M	1	15
Unit 7	Mandatory core unit	5	15	D	2	30
Unit 8	Mandatory core unit	5	20	D	2	40
Unit 20	Specialist unit	5	15	M	1	15
Unit 21	Specialist unit	5	15	M	1	(15)
Unit 23	Specialist unit	5	15	P	0	
Unit 25	Specialist unit	4	15	P	X	
Unit 26	Specialist unit	5	15	M	1	(15)
Unit 29	Specialist unit	4	15	M	X	
Unit 33	Specialist unit	4	15	M	X	
Unit 35	Specialist unit	5	15	M	1	(15)
Unit 36	Specialist unit	5	10	D	2	20
	Qualification grade totals	**Min 125 at level 5**	**260**			**105**

The learner can be considered for a merit:

only count the points from **the best 75** credits from a valid combination of 240 credits

X these units are **below** the level of the qualification so **cannot** be counted for grading

The best 75 credits include both mandatory core and optional units

() these units are not counted in the overall score

The learner has sufficient points for a merit grade.

Example 3

Achievement of an HND Diploma with a distinction grade

		Level	Credit	Grade	Grade points	Points per unit (weighting × credit points)
Unit 1	Mandatory core unit	4	15	P	X	
Unit 2	Mandatory core unit	4	15	M	X	
Unit 3	Mandatory core unit	4	15	D	X	
Unit 4	Mandatory core unit	4	15	D	X	
Unit 5	Mandatory core unit	4	15	M	X	
Unit 6	Mandatory core unit	5	15	D	2	30
Unit 7	Mandatory core unit	5	15	D	2	30
Unit 8	Mandatory core unit	5	20	D	2	30
Unit 20	Specialist unit	5	15	D	2	30
Unit 21	Specialist unit	5	15	D	2	30
Unit 23	Specialist unit	5	15	P	0	
Unit 25	Specialist unit	4	15	P	X	
Unit 26	Specialist unit	5	15	M	1	(15)
Unit 29	Specialist unit	4	15	M	X	
Unit 33	Specialist unit	4	15	M	X	
Unit 35	Specialist unit	5	15	M	1	(15)
Unit 36	Specialist unit	4	15	P	X	
	Qualification grade totals	**Min 125 at level 5**	**245**			**150**

The learner can be considered for a distinction:

only count the points from level 5 units for the best 75 credits from a valid combination of **240** credits

() these units are not counted in the overall score

X not counted as **below the** level of the qualification.

The learner has sufficient points for a distinction grade.

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