

# Specification

## BTEC Specialist qualifications

Edexcel BTEC Level 2 Certificate in ICT Systems and Principles (QCF)

Edexcel BTEC Level 3 Certificate in ICT Systems and Principles (QCF)

Edexcel BTEC Level 3 Diploma in ICT Systems and Principles (QCF)

For first teaching October 2010

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# BTEC Specialist qualification titles covered by this specification

**Edexcel BTEC Level 2 Certificate in ICT Systems and Principles**

**Edexcel BTEC Level 3 Certificate in ICT Systems and Principles**

**Edexcel BTEC Level 3 Diploma in ICT Systems and Principles**

These qualifications have been accredited to the Qualifications and Credit Framework (QCF) and are eligible for public funding as determined by the Department for Education (DfE) under Sections 96 and 97 of the Learning and Skills Act 2000.

The qualification titles listed above feature in the funding lists published annually by the DfE and the regularly updated website [www.education.gov.uk/](http://www.education.gov.uk/). The QCF Qualification Accreditation Number (QAN) should be used by centres when they wish to seek public funding for their learners. 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 Qualification Accreditation Number for the qualifications in this publication are:

Edexcel BTEC Level 2 Certificate in ICT Systems and Principles	501/1381/1
Edexcel BTEC Level 3 Certificate in ICT Systems and Principles	501/1436/0
Edexcel BTEC Level 3 Diploma in ICT Systems and Principles	501/1435/9

These qualification titles will appear on learners' certificates. Learners need to be made aware of this when they are recruited by the centre and registered with Edexcel.

These qualifications are accredited by Ofqual as being Stand Alone and part of Apprenticeships.

# Welcome to BTEC level 2 and 3 qualifications in ICT Systems and Principles

We are delighted to introduce our new qualification, which will be available for teaching from September 2010. This qualification has been revised and conforms with the requirements of the new QCF (Qualifications and Credit Framework).

## Focusing on the BTEC Level 2 and 3 qualifications in ICT Systems and Principles (QCF)

The BTEC Level 2 and 3 ICT Systems and Principles qualifications are technical certificates and/or stand-alone qualifications. These qualifications are essentially a major part of the Apprenticeship framework designed for learners wanting to acquire the knowledge and understanding required for employment/career progression in the IT and Telecommunications sector.

These qualifications replace the BTEC Nationals in Communications Technology (NQF), with many of the units imported and refreshed into these new qualifications. These qualifications can also be treated as stand-alone.

We have imported a wide range of units from the BTEC Level 2 and Level 3 ICT Systems and Principles for Apprentices (QCF) and BTEC Nationals in Communications Technology (NQF) allowing further choice and flexibility in how these qualifications are delivered.

These qualifications also enable learners to contribute the relevant skills towards the related BTEC Level 2 and 3 Diploma in Professional Competence, for learners following the Apprenticeship programme.

There are opportunities to progress within and between Level 2 Certificate in ICT Systems and Principles to Level 3 Certificate/Diploma in ICT Systems and Principles. Learners can also progress on to Higher Apprenticeships.

## Straightforward to implement, teach and assess

Implementing BTECs couldn't be easier. They are designed to easily fit into your curriculum and can be studied independently or alongside existing qualifications, to suit the interests and aspirations of learners. The clarity of assessment makes grading learner attainment simpler.

## Engaging for everyone

Learners of all abilities flourish when they can apply their own knowledge, skills and enthusiasm to a subject. BTEC qualifications make explicit the link between theoretical learning and the world of work by giving learners the opportunity to apply their research, skills and knowledge to work-related contexts and case studies. These applied and practical BTEC approaches give all learners the impetus they need to achieve and the skills they require for workplace or education progression.

## **Recognition**

BTECs are understood and recognised by a large number of organisations in a wide range of sectors. BTEC qualifications are developed with key industry representatives and Sector Skills Councils (SSC) to ensure that they meet employer and learner needs — in this case, e-Skills UK SSC. Many industry and professional bodies offer successful BTEC learners exemptions for their own accredited qualifications.

## **All you need to get started**

To help you off to a flying start, we've developed an enhanced specification that gives you all the information you need to start teaching BTEC. This includes:

- a framework of equivalencies, so you can see how this qualification compares with other Edexcel vocational qualifications
- information on rules of combination, structures and quality assurance, so you can deliver the qualification with confidence
- explanations of the content's relationship with the learning outcomes
- guidance on assessment, and what the learner must produce to achieve the unit.

Don't forget that we're always here to offer curriculum and qualification updates, local training and network opportunities, advice, guidance and support.



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# What are BTEC Level 2 and 3 Specialist qualifications?

BTEC Specialist qualifications are qualifications at Entry Level to Level 3 in the Qualifications and Credit Framework (QCF) and are designed to provide specialist work-related qualifications in a range of sectors. They give learners the knowledge, understanding and skills that they need to prepare for employment. The qualifications also provide career development opportunities for those already in work. Consequently they provide a course of study for full-time or part-time learners in schools, colleges and training centres.

BTEC Specialist qualifications provide much of the underpinning knowledge and understanding for the National Occupational Standards for the sector, where these are appropriate. They are supported by the relevant Standards Setting Body (SSB) or Sector Skills Council (SSC). A number of BTEC Specialist qualifications are recognised as the knowledge components of Apprenticeships Frameworks.

On successful completion of a BTEC Specialist qualification, learners can progress to or within employment and/or continue their study in the same, or related vocational area.

Care needs to be exercised when registering learners as the titling conventions and titles for the revised QCF versions of the BTEC Level 2 Firsts and BTEC Level 3 Nationals have changed.

The QCF is a framework which awards credit for qualifications and units and aims to present qualifications in a way that is easy to understand and measure. It enables learners to gain qualifications at their own pace along flexible routes.

There are three sizes of qualification in the QCF:

- Award (1 to 12 credits)
- Certificate (13 to 36 credits)
- Diploma (37 credits and above).

Every unit and qualification in the framework will have a credit value.

The credit value of a unit specifies the number of credits that will be awarded to a learner who has achieved the learning outcomes of the unit.

The credit value of a unit is based on:

- one credit for those learning outcomes achievable in 10 hours of learning
- learning time – 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.

The credit value of the unit will remain constant in all contexts, regardless of the assessment method used for the qualification(s) to which it contributes.

Learning time should address all learning (including assessment) relevant to the learning outcomes, regardless of where, when and how the learning has taken place.

## **Edexcel BTEC Level 2 Certificate**

The Edexcel BTEC Level 2 Certificate provides an introduction to the skills, qualities and knowledge that may be required for employment in a particular vocational sector.

The Edexcel BTEC Level 2 Certificate offers an engaging programme for those who are clear about the vocational area they want to learn more about. These learners may wish to extend their programme through the study of a related GCSE, a complementary NVQ or other related vocational or personal and social development qualification. These learning programmes can be developed to allow learners to study complementary qualifications without duplication of content.

For adult learners the Edexcel BTEC Level 2 Certificate can extend their knowledge and understanding of work in a particular sector. It is a suitable qualification for those wishing to change career or move into a particular area of employment following a career break.

## **Edexcel BTEC Level 3 Certificate**

The Edexcel BTEC Level 3 Certificate extends the work-related focus from the Edexcel BTEC Level 2 Certificate and covers some of the knowledge and practical skills required for a particular vocational sector.

The Edexcel BTEC Level 3 Certificate offers an engaging programme for those who are clear about the vocational area they want to learn more about. These learners may wish to extend their programme through the study of a related GCSE, a complementary NVQ or other related vocational or personal and social development qualification. These learning programmes can be developed to allow learners to study complementary qualifications without duplication of content.

For adult learners the Edexcel BTEC Level 3 Certificate can extend their knowledge and understanding of work in a particular sector. It is a suitable qualification for those wishing to change career or move into a particular area of employment following a career break.

## **Edexcel BTEC Level 3 Diploma**

The Edexcel BTEC Level 3 Diploma extends the work-related focus from the Edexcel BTEC Level 3 Certificate. There is potential for the qualification to prepare learners for employment in a particular vocational sector and it is suitable for those who have decided that they wish to enter a specific area of work.

## Key features of the Edexcel BTEC Level 2 and 3 qualifications in ICT Systems and Principles

The Edexcel BTEC Level 2 and 3 qualifications in ICT Systems and Principles have been developed to give learners the opportunity to:

- engage in learning that is relevant to them and which will provide opportunities to develop a range of skills and techniques, personal skills and attributes essential for successful performance in working life
- acquire knowledge and understanding required for employment and/or career progression in the IT and Telecommunications sector
- contribute their knowledge and understanding to the related Level 2 and 3 qualifications in Professional Competence
- achieve a nationally recognised Entry, Level 1, 2 or 3 vocationally-related qualification
- progress to related general and/or vocational qualifications.

## National Occupational Standards

Where relevant, Edexcel BTEC Level 2 and 3 qualifications are designed to provide some of the underpinning knowledge and understanding for the National Occupational Standards (NOS), as well as developing practical skills in preparation for work and possible achievement of NVQs in due course. NOS form the basis of National Vocational Qualifications (NVQs). Edexcel BTEC Level 2 and 3 (QCF) qualifications do not purport to deliver occupational competence in the sector, which should be demonstrated in a work context.

Each unit in the specification identifies links to elements of the NOS in *Annexe C*.

The Edexcel BTEC Level 2 and 3 Certificate/Diploma in ICT Systems and Principles relates to the following NOS.

- IT and Telecommunications Professionals



# Apprenticeship Framework information

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## Apprenticeship (Level 2)

Outcomes	Qualifications	Details
Competence Element	BTEC Level 2 Diploma in Professional Competence for IT and Telecommunications Professionals  <b>Total of 48 credits, of which 60% must be at Level 2 or above.</b>	<b>Mandatory units (9 credits)</b> Personal Effectiveness Level 2 Health and Safety Level 1
		<b>Optional units (a minimum of 39 credits)</b> Includes new and existing NOS-based units, and vendor units.
		<b>Restricted optional units (up to a maximum of 12 credits)</b> Includes IT User options
Knowledge Element	BTEC Level 2 Certificate in ICT Systems and Principles (QCF)  (minimum 13 credits)	Includes new e-Skills shared units No mandatory units specified by e-Skills UK
Functional Skills	Functional Skills qualifications in Mathematics at Level 1  Functional Skills qualifications in English at Level 1	The 'Relaxation Rule' for apprentices will continue for Functional Skills until 2016.  This means new apprentices with appropriate GCSEs in Maths and English, grade A*-C will not need to complete Functional Skills.
Personal Learning and Thinking Skills	Mapped to competence qualification	The 6 Personal Learning and Thinking Skills have been mapped into the new Personal Effectiveness unit at Level 2.

## Apprenticeship (Level 3)

Outcomes	Qualifications	Details
Competence Element	BTEC Level 3 Diploma in Professional Competence for IT and Telecommunications Professionals  <b>Total of 72 credits, of which 60% must be at Level 3 or above.</b>	<b>Mandatory units (12 credits)</b> Personal Effectiveness Level 3 Health and Safety Level 1
		<b>Optional units (a minimum of 60 credits)</b> Includes new and existing NOS-based units, and vendor units
		<b>Restricted optional units (up to a maximum of 24 credits)</b> Includes IT User options
Knowledge Element	BTEC Level 3 Certificate or Diploma in ICT Systems and Principles  (minimum 24 credits for Certificate and minimum 37 credits for Diploma)	Includes new e-Skills shared units No mandatory units specified by e-Skills UK.
Functional Skills	Functional Skills qualifications in Mathematics at Level 2  Functional Skills qualifications in English at Level 2	The 'Relaxation Rule' for apprentices will continue for Functional Skills until 2016.  This means new apprentices with appropriate GCSEs in Maths and English, grade A*-C will not need to complete Functional Skills.
Personal Learning and Thinking Skills	Mapped to competence qualification	The 6 Personal Learning and Thinking Skills have been mapped into the new Personal Effectiveness unit at Level 3.



## Higher Apprenticeship (Level 4)

Outcomes	Qualifications	Details
Competence Element	BTEC Level 4 Diploma in Professional Competence for IT and Telecommunications Professionals  <b>Total of 80 credits, of which 60% must be at Level 4 or above.</b>	<b>Mandatory units (15 credits)</b> Personal Effectiveness Level 4 Health and Safety Level 1
		<b>Optional units (a minimum of 65 credits)</b> Includes new and existing NOS-based units, and vendor units
		<b>Restricted optional units (up to a maximum of 24 credits)</b> Includes IT User options
Knowledge Element	Appropriate Foundation Degree or Higher National Certificate/Diploma in IT, Computing, Computing and Systems Development or Telecommunications	Includes new e-Skills shared units No mandatory units specified by e-Skills UK
Functional Skills	Functional Skills qualifications in Mathematics at Level 2  Functional Skills qualifications in English at Level 2	The 'Relaxation Rule' for apprentices will continue for Functional Skills until 2016.  This means new apprentices with appropriate GCSEs in Maths and English, grade A*-C will not need to complete Functional Skills.
Personal Learning and Thinking Skills	Mapped to competence qualification	The 6 Personal Learning and Thinking Skills have been mapped into the new Personal Effectiveness unit at Level 4.

### What are the benefits of these qualifications to the learner and employer?

These qualifications give learners the opportunity to:

- engage in learning which is relevant to them and that gives them opportunities to develop a range of skills and techniques, personal skills and attributes essential for successful performance in working life
- gain the knowledge, understanding and skills needed to prepare for employment
- gain a nationally recognised vocationally specific qualification to enter employment in the IT sector or to progress to higher education vocational qualifications
- develop Functional Skills and Personal Learning and Thinking Skills essential for successful performance in working life

- certificate smaller blocks of learning designed to motivate learners and encourage widening participation in education and training.

## **What are the potential job roles for those working towards these qualifications?**

- Business analyst
- Computer games designer
- Computer games technical support person
- Computer hardware engineer
- Computer service technician
- Internet/web professional
- IT product developer
- IT technical sales specialist
- IT trainer
- Telecommunications technician

## **What progression opportunities are available to learners who achieve these qualifications?**

At Level 2, learners could progress to employment in the IT sector or to higher education vocational qualifications such as the Edexcel BTEC Level 3 Diploma in IT.

At Level 3, learners could progress to employment in the IT sector or to higher education vocational qualifications such as the Edexcel BTEC Level 4 HNC Diploma in Computing and Systems Development.

At Level 4, learners could progress to employment in the IT sector or to higher education vocational qualifications such as the Edexcel BTEC Level 5 HND Diploma in Computing and Systems Development.

Additional information is available in *Annexe A*.

# Rules of combination

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The rules of combination specify the credits that need to be achieved, through the completion of particular units, for the qualification to be awarded. All accredited qualifications within the QCF have a set of rules of combination.

## Rules of combination for the Edexcel BTEC Level 2 and 3 qualifications

When combining units for an Edexcel BTEC Level 2 and 3 in ICT Systems and Principles, it is the centre's responsibility to ensure that the following rules of combination are adhered to.

### Edexcel BTEC Level 2 Certificate in ICT Systems and Principles

- 1 Qualification credit value: a minimum of 13 credits.
- 2 Minimum credit to be achieved at, or above, the level of the qualification: 8 credits.
- 3 All credits must be achieved from the units listed in this specification.
- 4 Units 56 to 60 (BOWMAN) are restricted access and are for Ministry of Defence only.

### Edexcel BTEC Level 3 Certificate in ICT Systems and Principles

- 1 Qualification credit value: a minimum of 24 credits.
- 2 Minimum credit to be achieved at, or above, the level of the qualification: 15 credits.
- 3 All credits must be achieved from the units listed in this specification.
- 4 Units 56 to 60 (BOWMAN) are restricted access and are for Ministry of Defence only.

### Edexcel BTEC Level 3 Diploma in ICT Systems and Principles

- 1 Qualification credit value: a minimum of 37 credits.
- 2 Minimum credit to be achieved at, or above, the level of the qualification: 22 credits.
- 3 All credits must be achieved from the units listed in this specification.
- 4 Units 56 to 60 (BOWMAN) are restricted access and are for Ministry of Defence only.

# Level 2 Certificate

# What is the qualification structure for the Edexcel BTEC Level 2 Certificate in ICT Systems and Principles (QCF)

The Edexcel BTEC Level 2 Certificate in ICT Systems and Principles is a 13 credit and 120 guided learning hour (GLH) qualification that consists of 60 optional units that provide for a combined total of 13 credits (where at least 8 credits must be at Level 2 or above).

Edexcel BTEC Level 2 Certificate in ICT Systems and Principles (QCF)			
Unit	Optional units	Credit	Level
1	Communicating in the IT Industry	5	2
2	Working in the IT Industry	5	2
3	Presenting Information Using IT	10	2
4	Project Planning Using IT	10	2
5	Computer Systems	10	2
6	Systems Architecture	6	2
7	IT Support	10	2
8	IT Fault Diagnosis and Remedy	10	2
9	An Introduction to Communication Technologies	9	2
10	An Introduction to Telephony Systems	9	2
11	Telecommunications Principles	7	2
12	Telecommunications Technologies	10	2
13	Mobile Communication Technologies	10	2
14	Principles of ICT Systems and Data Security	6	2
15	Networking Principles	6	2
16	Setting up an IT Network	10	2
17	Data Representation and Manipulation for IT	7	2
18	Mathematics for IT	10	2
19	Software Testing	6	2
20	Web Fundamentals	7	2
21	Supporting Organisations with IT	10	2
22	Doing Business Online	10	2
23	Communication and Employability Skills for IT	10	3
24	Project Planning with IT	10	3
25	Computer Systems	10	3
26	Systems Architecture	10	3

<b>Edexcel BTEC Level 2 Certificate in ICT Systems and Principles (QCF)</b>			
<b>Unit</b>	<b>Optional units</b>	<b>Credit</b>	<b>Level</b>
27	Maintaining Computer Systems	10	3
28	IT Technical Support	10	3
29	Communication Technologies	10	3
30	Telecommunications Principles	10	3
31	Telecommunications Systems	10	3
32	Telephony Voice Systems Operation	9	3
33	Communications Equipment Installation Techniques	9	3
34	Fault Diagnosis and Maintenance of Communications Equipment	9	3
35	Communications for Engineering Technicians	10	3
36	Communications Workshop Practice	10	3
37	Electrical and Electronic Principles	10	3
38	Principles and Applications of Electronic Devices and Circuits	10	3
39	Health and Safety in the Engineering Workplace	10	3
40	Principles of ICT Systems and Data Security	9	3
41	Networking Principles	10	3
42	Computer Networks	10	3
43	Core Network Techniques	9	3
44	Managing Networks	10	3
45	Networked Systems Security	10	3
46	Access Network Techniques and Applications	10	3
47	Advanced Data Representation and Manipulation for IT	7	3
48	Mathematics for IT Practitioners	10	3
49	Information Systems	10	3
50	Systems Analysis and Design	10	3
51	Software Design Fundamentals	10	3
52	Software Testing	9	3
53	Web Development	10	3
54	Impact of the Use of IT on Business Systems	10	3
55	e-Commerce	10	3

Edexcel BTEC Level 2 Certificate in ICT Systems and Principles (QCF)			
Unit	BOWMAN units	Credit	Level
	<b>The BOWMAN units are restricted access and are for Ministry of Defence only.</b>		
56	Manage BOWMAN Equipment	19	3
57	Operate BOWMAN Equipment	9	3
58	Manage BOWMAN Signal Training	3	3
59	Principles of BOWMAN Digitization	1	3
60	Supervise BOWMAN Equipment	14	3

### **BOWMAN units**

The BOWMAN units are restricted access and are for Ministry of Defence only.

Unit 56 subsumes Units 59 and 60. Essentially Unit 60 is the same as Unit 56, except that some aspects of electronic warfare have been removed. For learners not wanting to cover specific aspects of BOWMAN, Unit 59 gives an overview of how the BOWMAN system works.



# **Level 3 Certificate**

# What is the qualification structure for the Edexcel BTEC Level 3 Certificate in ICT Systems and Principles (QCF)

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The Edexcel BTEC Level 3 Certificate in ICT Systems and Principles is a 24 credit and 150 guided learning hour (GLH) qualification that consists of 60 optional units that provide for a combined total of 24 credits (where at least 15 credits must be at Level 3 or above).

Edexcel BTEC Level 3 Certificate in ICT Systems and Principles (QCF)			
Unit	Optional units	Credit	Level
1	Communicating in the IT Industry	5	2
2	Working in the IT Industry	5	2
3	Presenting Information Using IT	10	2
4	Project Planning Using IT	10	2
5	Computer Systems	10	2
6	Systems Architecture	6	2
7	IT Support	10	2
8	IT Fault Diagnosis and Remedy	10	2
9	An Introduction to Communication Technologies	9	2
10	An Introduction to Telephony Systems	9	2
11	Telecommunications Principles	7	2
12	Telecommunications Technologies	10	2
13	Mobile Communication Technologies	10	2
14	Principles of ICT Systems and Data Security	6	2
15	Networking Principles	6	2
16	Setting up an IT Network	10	2
17	Data Representation and Manipulation for IT	7	2
18	Mathematics for IT	10	2
19	Software Testing	6	2
20	Web Fundamentals	7	2
21	Supporting Organisations with IT	10	2
22	Doing Business Online	10	2
23	Communication and Employability Skills for IT	10	3
24	Project Planning with IT	10	3
25	Computer Systems	10	3
26	Systems Architecture	10	3

Edexcel BTEC Level 3 Certificate in ICT Systems and Principles (QCF)			
Unit	Optional units	Credit	Level
27	Maintaining Computer Systems	10	3
28	IT Technical Support	10	3
29	Communication Technologies	10	3
30	Telecommunications Principles	10	3
31	Telecommunications Systems	10	3
32	Telephony Voice Systems Operation	9	3
33	Communications Equipment Installation Techniques	9	3
34	Fault Diagnosis and Maintenance of Communications Equipment	9	3
35	Communications for Engineering Technicians	10	3
36	Communications Workshop Practice	10	3
37	Electrical and Electronic Principles	10	3
38	Principles and Applications of Electronic Devices and Circuits	10	3
39	Health and Safety in the Engineering Workplace	10	3
40	Principles of ICT Systems and Data Security	9	3
41	Networking Principles	10	3
42	Computer Networks	10	3
43	Core Network Techniques	9	3
44	Managing Networks	10	3
45	Networked Systems Security	10	3
46	Access Network Techniques and Applications	10	3
47	Advanced Data Representation and Manipulation for IT	7	3
48	Mathematics for IT Practitioners	10	3
49	Information Systems	10	3
50	Systems Analysis and Design	10	3
51	Software Design Fundamentals	10	3
52	Software Testing	9	3
53	Web Development	10	3
54	Impact of the Use of IT on Business Systems	10	3
55	e-Commerce	10	3

Edexcel BTEC Level 3 Certificate in ICT Systems and Principles (QCF)			
Unit	BOWMAN units	Credit	Level
	<b>The BOWMAN units are restricted access and are for Ministry of Defence only.</b>		
56	Manage BOWMAN Equipment	19	3
57	Operate BOWMAN Equipment	9	3
58	Manage BOWMAN Signal Training	3	3
59	Principles of BOWMAN Digitization	1	3
60	Supervise BOWMAN Equipment	14	3

### **BOWMAN units**

The BOWMAN units are restricted access and are for Ministry of Defence only.

Unit 56 subsumes Units 59 and 60. Essentially Unit 60 is the same as Unit 56, except that some aspects of electronic warfare have been removed. For learners not wanting to cover specific aspects of BOWMAN, Unit 59 gives an overview of how the BOWMAN system works.

# **Level 3 Diploma**

# What is the qualification structure for the Edexcel BTEC Level 3 Diploma in ICT Systems and Principles (QCF)

The Edexcel BTEC Level 3 Diploma in ICT Systems and Principles is a 37 credit and 320 guided learning hour (GLH) qualification that consists of 60 optional units that provide for a combined total of 37 credits (where at least 22 credits must be at Level 3 or above).

Edexcel BTEC Level 3 Diploma in ICT Systems and Principles (QCF)			
Unit	Optional units	Credit	Level
1	Communicating in the IT Industry	5	2
2	Working in the IT Industry	5	2
3	Presenting Information Using IT	10	2
4	Project Planning Using IT	10	2
5	Computer Systems	10	2
6	Systems Architecture	6	2
7	IT Support	10	2
8	IT Fault Diagnosis and Remedy	10	2
9	An Introduction to Communication Technologies	9	2
10	An Introduction to Telephony Systems	9	2
11	Telecommunications Principles	7	2
12	Telecommunications Technologies	10	2
13	Mobile Communication Technologies	10	2
14	Principles of ICT Systems and Data Security	6	2
15	Networking Principles	6	2
16	Setting up an IT Network	10	2
17	Data Representation and Manipulation for IT	7	2
18	Mathematics for IT	10	2
19	Software Testing	6	2
20	Web Fundamentals	7	2
21	Supporting Organisations with IT	10	2
22	Doing Business Online	10	2
23	Communication and Employability Skills for IT	10	3
24	Project Planning with IT	10	3
25	Computer Systems	10	3
26	Systems Architecture	10	3

Edexcel BTEC Level 3 Diploma in ICT Systems and Principles (QCF)			
Unit	Optional units	Credit	Level
27	Maintaining Computer Systems	10	3
28	IT Technical Support	10	3
29	Communication Technologies	10	3
30	Telecommunications Principles	10	3
31	Telecommunications Systems	10	3
32	Telephony Voice Systems Operation	9	3
33	Communications Equipment Installation Techniques	9	3
34	Fault Diagnosis and Maintenance of Communications Equipment	9	3
35	Communications for Engineering Technicians	10	3
36	Communications Workshop Practice	10	3
37	Electrical and Electronic Principles	10	3
38	Principles and Applications of Electronic Devices and Circuits	10	3
39	Health and Safety in the Engineering Workplace	10	3
40	Principles of ICT Systems and Data Security	9	3
41	Networking Principles	10	3
42	Computer Networks	10	3
43	Core Network Techniques	9	3
44	Managing Networks	10	3
45	Networked Systems Security	10	3
46	Access Network Techniques and Applications	10	3
47	Advanced Data Representation and Manipulation for IT	7	3
48	Mathematics for IT Practitioners	10	3
49	Information Systems	10	3
50	Systems Analysis and Design	10	3
51	Software Design Fundamentals	10	3
52	Software Testing	9	3
53	Web Development	10	3
54	Impact of the Use of IT on Business Systems	10	3
55	e-Commerce	10	3

Edexcel BTEC Level 3 Diploma in ICT Systems and Principles (QCF)			
Unit	BOWMAN units	Credit	Level
	The BOWMAN units are restricted access and are for Ministry of Defence only.		
56	Manage BOWMAN Equipment	19	3
57	Operate BOWMAN Equipment	9	3
58	Manage BOWMAN Signal Training	3	3
59	Principles of BOWMAN Digitization	1	3
60	Supervise BOWMAN Equipment	14	3

### **BOWMAN Units**

The BOWMAN units are restricted access and are for Ministry of Defence only.

Unit 56 subsumes Units 59 and 60. Essentially Unit 60 is the same as Unit 56, except that some aspects of electronic warfare have been removed. For learners not wanting to cover specific aspects of BOWMAN, Unit 59 gives an overview of how the BOWMAN system works.



# Assessment

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All units within these qualifications are internally assessed. The qualifications are criterion referenced, based on the achievement of all the specified learning outcomes.

The overall grading in this qualification is a 'pass', based upon the successful completion of the external assessment(s).

## Guidance

The purpose of assessment is to ensure that effective learning has taken place to give learners the opportunity to:

- meet the standard determined by the assessment criteria and
- achieve the learning outcomes.

All the assignments created by centres should be reliable and fit for purpose, and should be built on the unit assessment criteria. Assessment tasks and activities should enable learners to produce valid, sufficient and reliable evidence that relates directly to the specified criteria. Centres should enable learners to produce evidence in a variety of different forms, including performance observation, presentations and posters, along with projects, or time-constrained assessments.

Centres are encouraged to emphasise the practical application of the assessment criteria, providing a realistic scenario for learners to adopt, and making maximum use of practical activities. The creation of assignments that are fit for purpose is vital to achievement and their importance cannot be over-emphasised.

The assessment criteria must be clearly indicated in the assignments briefs. This gives learners focus and helps with internal verification and standardisation processes. It will also help to ensure that learner feedback is specific to the assessment criteria.

When designing assignments briefs, centres are encouraged to identify common topics and themes. A central feature of vocational assessment is that it allows for assessment to be:

- current, ie to reflect the most recent developments and issues
- local, ie to reflect the employment context of the delivering centre
- flexible to reflect learner needs, ie at a time and in a way that matches the learner's requirements so that they can demonstrate achievement.

## Qualification grade

Learners who achieve the minimum eligible credit value specified by the rule of combination will achieve the qualification at pass grade.

In the Edexcel BTEC Level 2 and 3 Specialist qualifications each unit has a credit value which specifies the number of credits that will be awarded to a learner who has achieved the learning outcomes of the unit. This has been based on:

- one credit for those learning outcomes achievable in 10 hours of learning time
- learning time being 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
- the credit value of the unit remaining constant regardless of the method of assessment used or the qualification to which it contributes.

## Quality assurance of centres

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Edexcel BTEC Level 2 and 3 qualifications provide a flexible structure for learners enabling programmes of varying credits and combining different levels. For the purposes of quality assurance, all individual qualifications and units are considered as a whole.

Centres delivering the Edexcel BTEC Level 2 and/or 3 must be committed to ensuring the quality of the units and qualifications they deliver, through effective standardisation of assessors and verification of assessor decisions. Centre quality assurance and assessment is monitored and guaranteed by Edexcel.

The Edexcel quality assurance processes will involve:

- centre approval for those centres not already recognised as a centre for BTEC qualifications
- approval for the Edexcel BTEC Level 2 and/or 3 qualifications and units
- **compulsory** Edexcel-provided training and standardisation for internal verifiers and assessors leading to the accreditation of lead internal verifiers via the OSCA system
- quality review of the centre verification practice
- centre risk assessment by Edexcel of overarching processes and quality standards
- remedial training and/or assessment sampling for centres identified through standardisation or risk assessment activities as having inadequate quality, assessment or internal verification processes.

## Approval

Centres are required to declare their commitment to ensuring the quality of the programme of learning and providing appropriate assessment opportunities for learners that lead to valid and accurate assessment outcomes. In addition, centres will commit to undertaking defined training and online standardisation activities.

Centres already holding BTEC approval are able to gain qualification approval online. New centres must complete a centre approval application.

## Quality Assurance Guidance

Details of quality assurance for the Edexcel BTEC Level 2 and 3 qualifications are set out in centre guidance which is published on our website ([www.edexcel.com](http://www.edexcel.com)).

## Programme design and delivery

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### Mode of delivery

Edexcel does not normally define the mode of delivery for Edexcel BTEC Entry to Level 3 qualifications. Centres are free to offer the qualifications using any mode of delivery (such as full-time, part-time, evening only, distance learning) that meets their learners' needs. Whichever 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.

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. Those planning the programme should aim to enhance the vocational nature of the qualification by:

- liaising with employers to ensure a course 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 experience of work and life that learners bring to the programme.

### Resources

Edexcel BTEC Level 2 and 3 qualifications are designed to give learners an understanding of the skills needed for specific vocational sectors. Physical resources need to support the delivery of the programme and the assessment of the learning outcomes, and should therefore normally be of industry standard. Staff delivering programmes should be familiar with current practice and standards in the sector concerned. Centres will need to meet any specific resource requirements to gain approval from Edexcel.

Where specific resources are required these have been indicated in individual units in the *Essential resources* sections.

## **Delivery approach**

It is important that centres develop an approach to teaching and learning that supports the vocational nature of Edexcel BTEC Level 2 and 3 qualifications and the mode of delivery. Specifications give a balance of practical skill development and knowledge requirements, some of which can be theoretical in nature. Tutors need to ensure that appropriate links are made between theory and practical application and that the knowledge base is applied to the sector. This requires the development of relevant and up-to-date teaching materials that allow learners to apply their learning to actual events and activity within the sector. Maximum use should be made of learners' experience.

## **Additional and Specialist Learning**

Additional and Specialist Learning (ASL) consists of accredited qualifications at the same level as, or one level above a 14-19 Diploma course of study, which have been approved under Section 96 of the Learning and Skills Act 2000. The ASL may include BTEC qualifications which are also available to learners not following a 14-19 Diploma course of study.

ASL qualifications are listed on the 14-19 Diploma Catalogue which is available on the Register of Regulated Qualifications ([www.ofqual.gov.uk](http://www.ofqual.gov.uk)). The catalogue will expand over time as more qualifications are accredited and approved.

Centres undertaking, or preparing to undertake, ASL should refer regularly to the Edexcel website for information regarding additions and the 14-19 Diploma Catalogue for the latest information.

## **Functional skills**

Edexcel Level 2 and 3 BTEC Specialist qualifications give learners opportunities to develop and apply functional skills. Functional skills are, however, not required to be achieved as part of the BTEC Specialist qualification(s) rules of combination. Functional skills are offered as stand alone qualifications.

# Access and recruitment

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Edexcel's policy regarding access to its qualifications is that:

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

Centres are required to recruit learners to BTEC 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 should consult Edexcel's policy on learners with particular requirements.

Centres will need to review the entry profile of qualifications and/or experience held by applicants, considering whether this profile shows an ability to progress to a higher level qualification.

## Restrictions on learner entry

The Edexcel BTEC Level 2 and 3 in ICT Systems and Principles are accredited on the QCF for learners aged 14 and above.

## Access arrangements and special considerations

Edexcel's policy on access arrangements and special considerations for BTEC and Edexcel NVQ qualifications aims to enhance access to the qualifications for learners with disabilities and other difficulties (as defined by the 1995 Disability Discrimination Act and the amendments to the Act) without compromising the assessment of skills, knowledge, understanding or competence.

Further details are given in the policy document *Access Arrangements and Special Considerations for BTEC and Edexcel NVQ Qualifications*, which can be found on the Edexcel website ([www.edexcel.com](http://www.edexcel.com)). This policy replaces the previous Edexcel policy (*Assessment of Vocationally Related Qualifications: Regulations and Guidance Relating to Learners with Special Requirements, 2002*) concerning learners with particular requirements.

# Unit format

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All units in the Edexcel BTEC Level 2 and 3 Specialist qualifications have a standard format. The unit format is designed to give guidance on the requirements of the qualification for learners, tutors, and those responsible for monitoring national standards.

Each unit has the following sections.

## Unit title

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

## Unit code

Each unit is assigned a QCF unit code that appears with the unit title on the National Database of Accredited Qualifications.

## QCF level

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 NOS and/or other sector/professional benchmarks.

## Credit value

All units have a credit value. The minimum credit value that may be determined for a unit is one, and credits can only be awarded in whole numbers. Learners will be awarded credits for the successful completion of whole units.

## Guided learning hours

Guided learning hours are defined as all the times 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. It also includes time spent by staff assessing learners' achievements. It does not include time spent by staff in day-to-day marking of assignments or homework where the learner is not present.

## Unit aim and purpose

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 introduction

The unit introduction 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 introduction also highlights any links to the appropriate vocational sector by describing how the unit relates to that sector.

## Learning outcomes

The learning outcomes of a unit set out what a learner is expected to know, understand or be able to do as the result of a process of learning.

## Assessment criteria

The assessment criteria of a unit specify the standard a learner is expected to meet to demonstrate that a learning outcome, or set of learning outcomes, has been achieved. The learning outcomes and assessment criteria clearly articulate the learning achievement for which the credit will be awarded at the level assigned to 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 the related National Occupational Standards (NOS), where relevant. The content provides the range of subject material for the programme of learning and specifies the skills, knowledge and understanding required for achievement of the unit.

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.

### **Relationship between content and assessment criteria**

The learner should have the opportunity to cover all of the unit content.

It is not a requirement of the unit specification that all of the content is assessed. However, the indicative content will need to be covered in a programme of learning in order for learners to be able to meet the standard determined in the assessment criteria.

### **Content structure and terminology**

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

- Learning outcome: this is shown 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 plain text and amplify the sub-heading. The elements must be covered in the delivery of the unit. Semi-colons mark the end of an element.
- Brackets contain amplification of content which must be covered in the delivery of the unit.
- 'eg' is a list of examples, used for indicative amplification of an element (that is, the content specified in this amplification could be covered or could be replaced by other, similar material).

## Essential guidance for tutors

This section gives tutors additional guidance and amplification to aid understanding and a consistent level of delivery and assessment. It is divided into the following sections.

- *Delivery* – explains the content's relationship to the learning outcomes and offers guidance about possible approaches to delivery. This section is based on the more usual delivery modes but is not intended to rule out alternative approaches.
- *Assessment* – gives amplification about the nature and type of evidence that learners need to produce in order to achieve the unit. This section should be read in conjunction with the assessment criteria.
- *Essential resources* – identifies any specialist resources needed to allow learners to generate the evidence required for each unit. The centre will be asked to ensure that any requirements are in place when it seeks approval from Edexcel to offer the qualification.
- *Indicative resource materials* – gives a list of learner resource material that benchmarks the level of study.



# Units

The units for the Edexcel BTEC Level 2 and 3 Certificate and Diploma in ICT Systems and Principles are on the Edexcel website.



## Further information

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For further information please call Customer Services on 0844 576 0026 (calls may be recorded for training purposes) or visit our website ([www.edexcel.com](http://www.edexcel.com)).

## Useful publications

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Related information and publications include:

- *Guidance for Centres Offering Edexcel/BTEC QCF Accredited Programmes* (Edexcel, distributed to centres annually)
- Functional skills publications – specifications, tutor support materials and question papers
- *Regulatory arrangements for the Qualification and Credit Framework* (published by Ofqual) August 2008
- the current Edexcel publications catalogue and update catalogue.

Edexcel publications concerning the Quality Assurance System and the internal and external verification of vocationally related programmes can be found on the Edexcel website and in the Edexcel publications catalogue.

NB: Some of our publications are priced. There is also a charge for postage and packing. Please check the cost when you order.

### How to obtain National Occupational Standards

e-Skills UK  
1 Castle Lane  
London  
SW1E 6DR

Telephone: 020 7963 8920  
Fax: 020 7592 9138  
Email: [info@e-skills.com](mailto:info@e-skills.com)

# Professional development and training

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Edexcel supports UK and international customers with training related to BTEC qualifications. This support is available through a choice of training options offered in our published training directory or through customised training at your centre.

The support we offer focuses on a range of issues including:

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

The national programme of training we offer can be viewed on our website ([www.edexcel.com/training](http://www.edexcel.com/training)). You can request customised training through the website or by contacting one of our advisers in the Training from Edexcel team via Customer Services to discuss your training needs.

Our customer service numbers are:

BTEC and NVQ	0844 576 0026
GCSE	0844 576 0027
GCE	0844 576 0025
The Diploma	0844 576 0028
DiDA and other qualifications	0844 576 0031

Calls may be recorded for training purposes.

The training we provide:

- is active – ideas are developed and applied
- is designed to be supportive and thought provoking
- builds on best practice.

Our training is underpinned by the LLUK standards for those preparing to teach and for those seeking evidence for their continuing professional development.

## Annexe A

### The Edexcel/BTEC qualification framework for the Information Technology and Telecommunications sector

Progression opportunities within the framework.

Level	General qualifications	BTEC full vocationally-related qualifications	BTEC specialist courses	NVQ/occupational
5		Edexcel Level 5 BTEC HND Diploma in Computing and Systems Development Edexcel Level 5 BTEC Diploma in Professional Software Development		
4		Edexcel Level 4 BTEC HNC Diploma in Computing and Systems Development		

Level	General qualifications	BTEC full vocationally-related qualifications	BTEC specialist courses	NVQ/occupational
3	<p>Edexcel Advanced Subsidiary GCE in Applied ICT (Single Award/Double Award)</p> <p>Edexcel Advanced GCE in Applied ICT (Single Award/Double Award)</p>	<p>Edexcel Level 3 BTEC Certificate/Subsidiary Diploma/Extended Diploma in IT</p>	<p>Edexcel Level 3 BTEC Award/Certificate/Extended Certificate in IT</p>	<p>Edexcel Level 3 BTEC Certificate/Subsidiary Diploma/Extended Diploma in IT ProCom</p> <p>Edexcel Level 3 BTEC Award/Certificate/Diploma for IT Users (ITQ)</p> <p>Edexcel Level 3 BTEC Certificate/Diploma in ICT Systems and Principles</p> <p>Edexcel Level 3 BTEC Award/Certificate/Diploma in ICT Professional Competence</p>
2	<p>Edexcel Functional Skills qualification in ICT at Level 2</p> <p>Edexcel GCSE in ICT</p> <p>Edexcel GCSE in ICT (Double Award)</p> <p>Edexcel Level 2 Award in Digital Applications for IT Users</p> <p>Edexcel Level 2 Certificate in Digital Applications for IT Users</p> <p>Edexcel Level 2 Extended Certificate in Digital Applications for IT Users</p> <p>Edexcel Level 2 Diploma in</p>	<p>Edexcel Level 2 BTEC Certificate/Extended Certificate/Diploma in IT</p>	<p>Edexcel Level 2 BTEC Award/Certificate/Extended Certificate in IT</p>	<p>Edexcel Level 2 BTEC Award/Certificate/Diploma for IT Users (ITQ)</p> <p>Edexcel Level 2 BTEC Certificate/Extended Certificate/Diploma in IT ProCom</p> <p>Edexcel Level 2 BTEC Certificate in ICT Systems and Principles</p> <p>Edexcel Level 2 BTEC Award/Certificate/Diploma in ICT Professional Competence</p>

Level	General qualifications	BTEC full vocationally-related qualifications	BTEC specialist courses	NVQ/occupational
1	Digital Applications for IT Users			
	Edexcel Functional Skills qualification in ICT at Level 1 Edexcel GCSE in ICT Edexcel GCSE in ICT (Double Award) Edexcel Level 1 Award in Digital Applications for IT Users Edexcel Level 1 Certificate in Digital Applications for IT Users Edexcel Level 1 Extended Certificate in Digital Applications for IT Users Edexcel Level 1 Diploma in Digital Applications for IT Users	Edexcel Level 1 BTEC Award in IT Users Edexcel Level 1 BTEC Certificate in IT Users Edexcel Level 1 BTEC Diploma in IT Users		Edexcel Level 1 BTEC Award/Certificate/Diploma for IT Users (ITQ)
	Edexcel Functional Skills qualifications in IT at Entry 1, 2 and 3			Edexcel Entry Level 3 BTEC Award/Certificate for IT Users (ITQ)





# Annexe B

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## Wider curriculum mapping

Edexcel BTEC Level 2 and 3 qualifications give learners opportunities to develop an understanding of spiritual, moral, ethical, social and cultural issues as well as an awareness of citizenship, environmental issues, European developments, health and safety considerations and equal opportunities issues.

### **Spiritual, moral, ethical, social and cultural issues**

Throughout the delivery of these qualifications learners will have the opportunity to actively participate in different kinds of decision making. They will have to consider fair and unfair situations and explore how to resolve conflict. Working in small groups they will learn how to respect and value others' beliefs, backgrounds and traditions.

### **Citizenship**

Learners undertaking these qualifications will have the opportunity to develop their understanding of citizenship issues.

### **Environmental issues**

Developing a responsible attitude towards the care of the environment is an integral part of this qualification. Learners are encouraged to minimise waste and discuss controversial issues.

### **European developments**

Much of the content of the qualification applies throughout Europe, even though the delivery is in a UK context.

### **Health and safety considerations**

Health and safety is embedded within many of the units in this qualification. Learners will consider their own health and safety at work, how to identify risks and hazards and how to minimise those risks.

### **Equal opportunities issues**

There will be opportunities throughout this qualification to explore different kinds of rights and how these affect both individuals and communities, for example learners will consider their rights at work and the rights of employers and how these rights affect the work community.



# Annexe C

## Level 2 National Occupational Standards/mapping

The grid below maps the knowledge covered in the Edexcel BTEC Level 2 Specialist qualifications in ICT Systems and Principles against the underpinning knowledge of the Level 2 National Occupational Standards in IT and Telecommunications Professionals.

### KEY

✓ indicates partial coverage of the NVQ unit

a blank space indicates no coverage of the underpinning knowledge

Units	Unit 1: Communicating in the IT Industry	Unit 2: Working in the IT Industry	Unit 3: Presenting Information Using IT	Unit 4: Project Planning Using IT	Unit 5: Computer Systems	Unit 6: Systems Architecture	Unit 7: IT Support	Unit 8: IT Fault Diagnosis and Remedy	Unit 9: An Introduction to Communication Technologies	Unit 10: An Introduction to Telephony Systems	Unit 11: Telecommunications Principles	Unit 12: Telecommunications Technology	Unit 13: Mobile Communication Technologies	Unit 14: Principles of ICT Systems and Data Security	Unit 15: Networking Principles	Unit 16: Setting up an IT Network	Unit 17: Data Representation and Manipulation for IT	Unit 18: Mathematics for IT	Unit 19: Software Testing
4.1 Systems Architecture					✓	✓													
4.2 Data Analysis																	✓		
4.3 Human Needs Analysis		✓			✓								✓						

Units	Unit 1: Communicating in the IT Industry	Unit 2: Working in the IT Industry	Unit 3: Presenting Information Using IT	Unit 4: Project Planning Using IT	Unit 5: Computer Systems	Unit 6: Systems Architecture	Unit 7: IT Support	Unit 8: IT Fault Diagnosis and Remedy	Unit 9: An Introduction to Communication Technologies	Unit 10: An Introduction to Telephony Systems	Unit 11: Telecommunications Principles	Unit 12: Telecommunications Technology	Unit 13: Mobile Communication Technologies	Unit 14: Principles of ICT Systems and Data Security	Unit 15: Networking Principles	Unit 16: Setting up an IT Network	Unit 17: Data Representation and Manipulation for IT	Unit 18: Mathematics for IT	Unit 19: Software Testing
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	✓																		
5.1 Systems Development					✓				✓	✓	✓								
5.2 Software Development					✓														✓
5.3 IT/Technology Solution Testing	✓								✓	✓	✓								✓
6.1 Information Management	✓																		

Units	Unit 1: Communicating in the IT Industry	Unit 2: Working in the IT Industry	Unit 3: Presenting Information Using IT	Unit 4: Project Planning Using IT	Unit 5: Computer Systems	Unit 6: Systems Architecture	Unit 7: IT Support	Unit 8: IT Fault Diagnosis and Remedy	Unit 9: An Introduction to Communication Technologies	Unit 10: An Introduction to Telephony Systems	Unit 11: Telecommunications Principles	Unit 12: Telecommunications Technology	Unit 13: Mobile Communication Technologies	Unit 14: Principles of ICT Systems and Data Security	Unit 15: Networking Principles	Unit 16: Setting up an IT Network	Unit 17: Data Representation and Manipulation for IT	Unit 18: Mathematics for IT	Unit 19: Software Testing
6.2 IT Security Management	✓				✓									✓					
6.3 IT Disaster Recovery																			
7.1 IT/Technology Service Operations and Event Management																			
7.2 IT/Technology Service Helpdesk and Incident Management							✓												
7.3 IT/Technology Problem Management								✓											
7.4 IT Application Management/ Support								✓											
7.5 IT/Technology Management and Support								✓											
7.6 Availability Management																			

Units	Unit 1: Communicating in the IT Industry	Unit 2: Working in the IT Industry	Unit 3: Presenting Information Using IT	Unit 4: Project Planning Using IT	Unit 5: Computer Systems	Unit 6: Systems Architecture	Unit 7: IT Support	Unit 8: IT Fault Diagnosis and Remedy	Unit 9: An Introduction to Communication Technologies	Unit 10: An Introduction to Telephony Systems	Unit 11: Telecommunications Principles	Unit 12: Telecommunications Technology	Unit 13: Mobile Communication Technologies	Unit 14: Principles of ICT Systems and Data Security	Unit 15: Networking Principles	Unit 16: Setting up an IT Network	Unit 17: Data Representation and Manipulation for IT	Unit 18: Mathematics for IT	Unit 19: Software Testing
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																			
7.10 IT/Technology Asset and Configuration Management																			
7.11 Supplier Management																			
7.12 Technical Evaluation																			

Units	Unit 20: Web Fundamentals	Unit 21: Supporting Organisations with IT	Unit 22: Doing Business Online
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			
5.1 Systems Development			

Units	Unit 20: Web Fundamentals	Unit 21: Supporting Organisations with IT	Unit 22: Doing Business Online
5.2 Software Development	✓		
5.3 IT/Technology Solution Testing			
6.1 Information Management		✓	
6.2 IT Security Management			
6.3 IT Disaster Recovery			
7.1 IT/Technology Service Operations and Event Management			
7.2 IT/Technology Service Helpdesk and Incident Management			
7.3 IT/Technology Problem Management			



Units	Unit 20: Web Fundamentals	Unit 21: Supporting Organisations with IT	Unit 22: Doing Business Online
7.4 IT Application Management/ Support			
7.5 IT/Technology Management and Support			
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			

Units	Unit 20: Web Fundamentals	Unit 21: Supporting Organisations with IT	Unit 22: Doing Business Online
7.10 IT/Technology Asset and Configuration Management			
7.11 Supplier Management			✓
7.12 Technical Evaluation			

### Level 3 National Occupational Standards/mapping

The grid below maps the knowledge covered in the Edexcel BTEC Level 3 Specialist qualifications in ICT Systems and Principles against the underpinning knowledge of the Level 3 National Occupational Standards in IT and Telecommunications Professionals.

#### KEY

✓ indicates partial coverage of the NVQ unit

a blank space indicates no coverage of the underpinning knowledge

Units	Unit 23: Communication and Employability Skills for IT	Unit 24: Project Planning with IT	Unit 25: Computer Systems	Unit 26: Systems Architecture	Unit 27: Maintaining Computer Systems	Unit 28: IT Technical Support	Unit 29: Communication Technologies	Unit 30: Telecommunications Principles	Unit 31: Telecommunications Systems	Unit 32: Telephony Voice Systems Operations	Unit 33: Communications Equipment Installation Tech.	Unit 34: Fault Diagnosis and Maintenance of Comm.	Unit 35: Communications for Engineering Technicians	Unit 36: Communications Workshop Practices	Unit 37: Electrical and Electronic Principles	Unit 38: Principles and Applications of Electronic Dev	Unit 39: Health and Safety in the Engineering Workplace	Unit 40: Principles of ICT Systems and Data Security	Unit 41: Networking Principles	Unit 42: Computer Networks		
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													✓									

Units	Unit 23: Communication and Employability Skills for IT	Unit 24: Project Planning with IT	Unit 25: Computer Systems	Unit 26: Systems Architecture	Unit 27: Maintaining Computer Systems	Unit 28: IT Technical Support	Unit 29: Communication Technologies	Unit 30: Telecommunications Principles	Unit 31: Telecommunications Systems	Unit 32: Telephony Voice Systems Operations	Unit 33: Communications Equipment Installation Tech.	Unit 34: Fault Diagnosis and Maintenance of Comm.	Unit 35: Communications for Engineering Technicians	Unit 36: Communications Workshop Practices	Unit 37: Electrical and Electronic Principles	Unit 38: Principles and Applications of Electronic Dev	Unit 39: Health and Safety in the Engineering Workplace	Unit 40: Principles of ICT Systems and Data Security	Unit 41: Networking Principles	Unit 42: Computer Networks
4.7 Systems Design			✓				✓	✓	✓	✓	✓	✓		✓					✓	
4.8 IT/Technology Infrastructure Design and Planning		✓											✓							
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																				
7.1 IT/Technology Service Operations and Event Management																				

Units	Unit 23: Communication and Employability Skills for IT	Unit 24: Project Planning with IT	Unit 25: Computer Systems	Unit 26: Systems Architecture	Unit 27: Maintaining Computer Systems	Unit 28: IT Technical Support	Unit 29: Communication Technologies	Unit 30: Telecommunications Principles	Unit 31: Telecommunications Systems	Unit 32: Telephony Voice Systems Operations	Unit 33: Communications Equipment Installation Tech.	Unit 34: Fault Diagnosis and Maintenance of Comm.	Unit 35: Communications for Engineering Technicians	Unit 36: Communications Workshop Practices	Unit 37: Electrical and Electronic Principles	Unit 38: Principles and Applications of Electronic Dev	Unit 39: Health and Safety in the Engineering Workplace	Unit 40: Principles of ICT Systems and Data Security	Unit 41: Networking Principles	Unit 42: Computer Networks		
7.2 IT/Technology Service Helpdesk and Incident Management					✓	✓																
7.3 IT/Technology Problem Management						✓																
7.4 IT Application Management/ Support																						
7.5 IT/Technology Management and Support																						
7.6 Availability Management																						
7.7 IT/Technology Capacity Management																						
7.8 Change and Release Management																						

Units	Unit 23: Communication and Employability Skills for IT	Unit 24: Project Planning with IT	Unit 25: Computer Systems	Unit 26: Systems Architecture	Unit 27: Maintaining Computer Systems	Unit 28: IT Technical Support	Unit 29: Communication Technologies	Unit 30: Telecommunications Principles	Unit 31: Telecommunications Systems	Unit 32: Telephony Voice Systems Operations	Unit 33: Communications Equipment Installation Tech.	Unit 34: Fault Diagnosis and Maintenance of Comm.	Unit 35: Communications for Engineering Technicians	Unit 36: Communications Workshop Practices	Unit 37: Electrical and Electronic Principles	Unit 38: Principles and Applications of Electronic Dev	Unit 39: Health and Safety in the Engineering Workplace	Unit 40: Principles of ICT Systems and Data Security	Unit 41: Networking Principles	Unit 42: Computer Networks	
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																					
7.12 Technical Evaluation																					

Units	Unit 43: Core Network Techniques	Unit 44: Managing Networks	Unit 45: Networked Systems Security	Unit 46: Access Network Techniques and Applications	Unit 47: Advanced Data Representation and Manipul.	Unit 48: Mathematics for IT	Unit 49: Information Systems Design	Unit 50: Systems Analysis and Fundamentals	Unit 51: Software Design Fundamentals	Unit 52: Software Testing	Unit 53: Web Development	Unit 54: Impact of the Use of IT on Business Systems	Unit 55: e-Commerce
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		✓											
5.1 Systems Development	✓			✓				✓					

Units	Unit 43: Core Network Techniques	Unit 44: Managing Networks	Unit 45: Networked Systems Security	Unit 46: Access Network Techniques and Applications	Unit 47: Advanced Data Representation and Manipul.	Unit 48: Mathematics for IT	Unit 49: Information Systems Design	Unit 50: Systems Analysis and Design	Unit 51: Software Design Fundamentals	Unit 52: Software Testing	Unit 53: Web Development	Unit 54: Impact of the Use of IT on Business Systems	Unit 55: e-Commerce
5.2 Software Development					✓				✓	✓	✓		
5.3 IT/Technology Solution Testing	✓			✓						✓			
6.1 Information Management							✓					✓	
6.2 IT Security Management			✓										✓
6.3 IT Disaster Recovery													
7.1 IT/Technology Service Operations and Event Management													
7.2 IT/Technology Service Helpdesk and Incident Management													
7.3 IT/Technology Problem Management													



Units	Unit 43: Core Network Techniques	Unit 44: Managing Networks	Unit 45: Networked Systems Security	Unit 46: Access Network Techniques and Applications	Unit 47: Advanced Data Representation and Manipul.	Unit 48: Mathematics for IT	Unit 49: Information Systems Design	Unit 50: Systems Analysis and Design	Unit 51: Software Design Fundamentals	Unit 52: Software Testing	Unit 53: Web Development	Unit 54: Impact of the Use of IT on Business Systems	Unit 55: e-Commerce
7.4 IT Application Management/ Support													
7.5 IT/Technology Management and Support													
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													

Units	Unit 43: Core Network Techniques	Unit 44: Managing Networks	Unit 45: Networked Systems Security	Unit 46: Access Network Techniques and Applications	Unit 47: Advanced Data Representation and Manipul.	Unit 48: Mathematics for IT	Unit 49: Information Systems Design	Unit 50: Systems Analysis and Design	Unit 51: Software Design Fundamentals	Unit 52: Software Testing	Unit 53: Web Development	Unit 54: Impact of the Use of IT on Business Systems	Unit 55: e-Commerce
7.10 IT/Technology Asset and Configuration Management													
7.11 Supplier Management													
7.12 Technical Evaluation													

# Annexe D

## Mapping to Level 2 Functional Skills

Level 2		Unit number																						
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
<b>English – Speaking, Listening and Communication</b>	Make a range of contributions to discussions in a range of contexts, including those that are unfamiliar, and make effective presentations																							
<b>English – Reading</b>	Select, read, understand and compare texts and use them to gather information, ideas, arguments and opinions																							
<b>English – Writing</b>	Write a range of texts, including extended written documents, communicating information, ideas and opinions, effectively and persuasively												✓	✓										

Level 2	Unit number																								
	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	
<b>English – Speaking, Listening and Communication</b>					✓							✓		✓	✓										
Make a range of contributions to discussions in a range of contexts, including those that are unfamiliar, and make effective presentations					✓							✓		✓	✓										
<b>English – Reading</b>																									
Select, read, understand and compare texts and use them to gather information, ideas, arguments and opinions					✓							✓		✓	✓										
<b>English – Writing</b>																									
Write a range of texts, including extended written documents, communicating information, ideas and opinions, effectively and persuasively		✓										✓		✓	✓										

Level 2	Unit number							
	48	49	50	51	52	53	54	55
<b>English – Speaking, Listening and Communication</b> Make a range of contributions to discussions in a range of contexts, including those that are unfamiliar, and make effective presentations								
<b>English – Reading</b> Select, read, understand and compare texts and use them to gather information, ideas, arguments and opinions				✓				
<b>English – Writing</b> Write a range of texts, including extended written documents, communicating information, ideas and opinions, effectively and persuasively			✓					

Level 2	Unit number																								
	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	
<b>Mathematics – Representing</b>			✓											✓		✓									
Understand routine and non-routine problems in familiar and unfamiliar contexts and situations			✓											✓		✓									
Identify the situation or problems and identify the mathematical methods needed to solve them	✓													✓											
Select a range of mathematics to find solutions																									✓
<b>Mathematics – Analysing</b>																									
Apply a range of mathematics to find solutions			✓				✓							✓											✓
Use appropriate checking procedures and evaluate their effectiveness at each stage														✓											
<b>Mathematics – Interpreting</b>																									
Interpret and communicate solutions to multistage practical problems in familiar and unfamiliar contexts and situations															✓										✓
Draw conclusions and provide mathematical justifications																									✓

Level 2	Unit number									
	48	49	50	51	52	53	54	55		
<b>Mathematics – Representing</b>										
Understand routine and non-routine problems in familiar and unfamiliar contexts and situations										
Identify the situation or problems and identify the mathematical methods needed to solve them										
Select a range of mathematics to find solutions	✓									
<b>Mathematics – Analysing</b>										
Apply a range of mathematics to find solutions	✓									
Use appropriate checking procedures and evaluate their effectiveness at each stage										
<b>Mathematics – Interpreting</b>										
Interpret and communicate solutions to multistage practical problems in familiar and unfamiliar contexts and situations	✓									
Draw conclusions and provide mathematical justifications	✓									

Level 2	Unit number																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
ICT – Using ICT	✓			✓	✓		✓	✓						✓		✓			✓	✓				
Plan solutions to complex tasks by analysing the necessary stages				✓	✓		✓	✓						✓		✓			✓	✓				
Select, interact with and use ICT systems safely and securely for a complex task in non-routine and unfamiliar contexts			✓		✓	✓		✓	✓			✓	✓		✓				✓	✓				✓
Manage information storage to enable efficient retrieval							✓																	
<b>ICT – Finding and selecting information</b>																								
Use appropriate search techniques to locate and select relevant information						✓	✓			✓				✓					✓					
Select information from a variety of sources to meet requirements of a complex task			✓			✓	✓			✓					✓				✓	✓				



Level 2	Unit number																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
ICT – Developing, presenting and communicating information			✓				✓																	
Enter, develop and refine information using appropriate software to meet requirements of a complex task			✓																					
Use appropriate software to meet the requirements of a complex data-handling task			✓																✓					
Use communications software to meet requirements of a complex task																		✓						✓
Combine and present information in ways that are fit for purpose and audience			✓				✓		✓	✓				✓			✓	✓	✓	✓			✓	✓
Evaluate the selection, use and effectiveness of ICT tools and facilities used to present information	✓		✓	✓																				✓

Level 2	Unit number																								
	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	
ICT – Using ICT	✓	✓		✓	✓												✓				✓				
Plan solutions to complex tasks by analysing the necessary stages	✓	✓		✓	✓					✓								✓				✓			
Select, interact with and use ICT systems safely and securely for a complex task in non-routine and unfamiliar contexts	✓	✓		✓	✓	✓				✓	✓	✓							✓			✓			
Manage information storage to enable efficient retrieval																									
ICT – Finding and selecting information																									
Use appropriate search techniques to locate and select relevant information			✓		✓		✓	✓	✓	✓	✓		✓				✓		✓					✓	
Select information from a variety of sources to meet requirements of a complex task	✓		✓		✓		✓	✓	✓	✓									✓						

Level 2	Unit number																								
	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	
ICT – Developing, presenting and communicating information												✓													
<ul style="list-style-type: none"> <li>Enter, develop and refine information using appropriate software to meet requirements of a complex task</li> </ul>												✓													
<ul style="list-style-type: none"> <li>Use appropriate software to meet the requirements of a complex data-handling task</li> </ul>																									
<ul style="list-style-type: none"> <li>Use communications software to meet requirements of a complex task</li> </ul>					✓	✓																			
<ul style="list-style-type: none"> <li>Combine and present information in ways that are fit for purpose and audience</li> </ul>	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓					✓	✓	✓	✓	✓			✓	
<ul style="list-style-type: none"> <li>Evaluate the selection, use and effectiveness of ICT tools and facilities used to present information</li> </ul>	✓											✓						✓							

Level 2	Unit number							
	48	49	50	51	52	53	54	55
<b>ICT – Using ICT</b>								
Plan solutions to complex tasks by analysing the necessary stages	✓	✓	✓	✓	✓	✓		
Select, interact with and use ICT systems safely and securely for a complex task in non-routine and unfamiliar contexts			✓		✓	✓		
Manage information storage to enable efficient retrieval								
<b>ICT – Finding and selecting information</b>								
Use appropriate search techniques to locate and select relevant information		✓	✓		✓		✓	✓
Select information from a variety of sources to meet requirements of a complex task		✓			✓	✓	✓	✓

Level 2	Unit number							
ICT – Developing, presenting and communicating information	48	49	50	51	52	53	54	55
<ul style="list-style-type: none"> <li>Enter, develop and refine information using appropriate software to meet requirements of a complex task</li> </ul>		✓						
<ul style="list-style-type: none"> <li>Use appropriate software to meet the requirements of a complex data-handling task</li> </ul>		✓	✓	✓		✓		
<ul style="list-style-type: none"> <li>Use communications software to meet requirements of a complex task</li> </ul>								
<ul style="list-style-type: none"> <li>Combine and present information in ways that are fit for purpose and audience</li> </ul>		✓	✓			✓	✓	✓
<ul style="list-style-type: none"> <li>Evaluate the selection, use and effectiveness of ICT tools and facilities used to present information</li> </ul>				✓				



# Annexe E

## Unit mapping overview

The BTEC Level 2 and 3 short course in ICT Systems and Principles for Apprentices (legacy specification end date 31/08/2010) and BTEC Nationals in Communication Technologies (NQF) (legacy specification end date 31/08/2010) against new QCF versions of the BTEC Level 2 and 3 specialist qualifications in ICT Systems and Principles (QCF) (specification start date 01/09/2010).

Unit	QCF Unit title	ICT Systems and Principles for Apprentices	BTEC Nationals Communications Technology (NQF)	Level of similarity between units
		Maps to unit number	Maps to NQF unit number	
1	Communicating in the IT			N
2	Working in the IT Industry			N
3	Presenting Information Using ICT	206		N
4	Project Planning Using ICT	205		N
5	Computer Systems	201		N
6	Systems Architecture			N
7	IT Support			N
8	IT Fault Diagnosis and Remedy			N
9	An Introduction to Communication Technologies	203		F
10	An Introduction to Telephony Systems	202		F
11	Telecommunications Principles			N
12	Telecommunications Technology			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

		ICT Systems and Principles for Apprentices	BTEC Nationals Communications Technology (NQF)	
Unit	QCF Unit title	Maps to unit number	Maps to NQF unit number	Level of similarity between units
13	Mobile Communication			N
14	Principles of ICT Systems and Data Security	204		N
15	Networking Principles			N
16	Setting up an IT Network			N
17	Data Representation and Manipulation for IT			N
18	Mathematics for IT			N
19	Software Testing			N
20	Web Fundamentals			N
21	Supporting Organisations with IT			N
22	Doing Business Online			N
23	Communication and Employability Skills of IT			N
24	Project Planning with IT	313	3	F
25	Computer Systems	301	100	N
26	Systems Architecture	302	104	N
27	Maintaining Computer	310	102	F
28	IT Technical Support			N
29	Communication Technologies	304	105	F
30	Telecommunications	303	90	F
31	Telecommunications Systems		93	F
32	Telephony Voice Systems Operation	305	97	F
33	Communications Equipment Installation Techniques	311	95	F
34	Fault Diagnosis and Maintenance of Communications Equipment	312	94	F

#### 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



		ICT Systems and Principles for Apprentices	BTEC Nationals Communications Technology (NQF)	
Unit	QCF Unit title	Maps to unit number	Maps to NQF unit number	Level of similarity between units
35	Communications for Engineering Technicians	314	2	F
36	Communications Workshop Practices		89	F
37	Electrical and Electronic Principles		5	F
38	Principles and Applications of Electronic Devices and Circuits		35	F
39	Health and Safety in the Engineering Workplace	316	7	F
40	Principles of ICT Systems and Data Security			N
41	Networking Principles	306		N
42	Computer Networks		106	F
43	Core Network Techniques	307	92	F
44	Managing Networks	308	140	F
45	Networked Systems Security	309	141	F
46	Access Network Techniques and Applications		91	F
47	Advanced Data Representation and Manipulation for IT			N
48	Mathematics for IT		4	N
49	Information Systems			N
50	Systems Analysis and Design			N
51	Software Design		103	N
52	Software Testing			N
53	Web 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

		ICT Systems and Principles for Apprentices	BTEC Nationals Communications Technology (NQF)	
Unit	QCF Unit title	Maps to unit number	Maps to NQF unit number	Level of similarity between units
54	Impact of the Use of IT on Business Systems	315		F
55	e-Commerce			N
56	Manage BOWMAN Equipment	317		F
57	Operate BOWMAN Equipment	318		F
58	Manage BOWMAN Signal	319		F
59	Principles of BOWMAN	320		F
60	Supervise BOWMAN	321		F

**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

# Annexe F

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## Glossary of accreditation terminology

The following information about these qualifications can also be found on the Edexcel website – see: ‘Accreditation Information’ (link).

<b>Accreditation start/end date</b>	The first/last dates that Edexcel can register learners for a qualification.
<b>Certification end date</b>	The last date on which a certificate may be issued by Edexcel.
<b>Credit value</b>	All units have a credit value. The minimum credit value that may be determined for a unit is one, and credits can only be awarded in whole numbers. Learners will be awarded credits for the successful completion of whole units.
<b>Guided Learning Hours (GLH)</b>	Guided learning hours are defined as all the times 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. It also includes time spent by staff assessing learners’ achievements. It does not include time spent by staff in day-to-day marking of assignments or homework where the learner is not present.
<b>Learning Aims Database</b>	Link to the Learning Aims Database, which features detailed funding information by specific learning aim reference.
<b>Learning Aim Reference</b>	Unique reference number given to the qualification by the funding authorities on accreditation.
<b>Level</b>	The level at which the qualification is positioned in the Qualifications and Credit Framework (QCF).
<b>Performance tables</b>	These qualifications are listed on the Department for Education (DfE) website School and College Achievement and Attainment Tables (SCAAT) as performance indicators for schools and colleges.
<b>Qualifications Accreditation Number (QAN)</b>	Unique reference number given to the qualification by the regulatory authorities on accreditation.
<b>Register of Regulated Qualifications</b>	Link to the entry on the Register of Regulated Qualifications for a particular qualification. This database features detailed accreditation information for the particular qualification.

<b>Section 96</b>	Section 96 is a section of the Learning and Skills Act 2000. This shows for which age ranges the qualification is publicly funded for under-19 learners.
<b>Section 97</b>	Section 97 is a section of the Learning and Skills Act 2000. This shows whether the qualification is publicly funded for learners aged 19 and over.
<b>Title</b>	The accredited title of the qualification.
<b>UCAS points</b>	This/these qualification(s) is/are listed on the Universities and Colleges Admissions Service (UCAS) tariff for those wishing to progress to higher education.

## Annexe G

### BTEC Specialist and Professional qualifications

BTEC qualifications on the NQF	Level	BTEC Specialist and Professional Qualifications on the QCF	BTEC qualification suites on the QCF
<b>BTEC Level 7 Advanced Professional Qualifications</b> BTEC Advanced Professional Award, Certificate and Diploma	7	<b>BTEC Level 7 Professional Qualifications</b> BTEC Level 7 Award, Certificate, Extended Certificate and Diploma	
<b>BTEC Level 6 Professional Qualifications</b> BTEC Professional Award, Certificate and Diploma	6	<b>BTEC Level 6 Professional Qualifications</b> BTEC Level 6 Award, Certificate, Extended Certificate and Diploma	
<b>BTEC Level 5 Professional Qualifications</b> BTEC Professional Award, Certificate and Diploma	5	<b>BTEC Level 5 Professional Qualifications</b> BTEC Level 5 Award, Certificate, Extended Certificate and Diploma	<b>BTEC Level 5 Higher Nationals</b> BTEC Level 5 HND Diploma
<b>BTEC Level 4 Professional Qualifications</b> BTEC Professional Award, Certificate and Diploma	4	<b>BTEC Level 4 Professional Qualifications</b> BTEC Level 4 Award, Certificate, Extended Certificate and Diploma	<b>BTEC Level 4 Higher Nationals</b> BTEC Level 4 HNC Diploma
<b>BTEC Level 3 Qualifications</b> BTEC Award, Certificate, Extended Certificate and Diploma	3	<b>BTEC Level 3 Specialist Qualifications</b> BTEC Level 3 Award, Certificate, Extended Certificate and Diploma	<b>BTEC Level 3 Nationals</b> BTEC Level 3 Certificate, Subsidiary Diploma, Diploma and Extended Diploma

<b>BTEC qualifications on the NQF</b>	<b>Level</b>	<b>BTEC Professional and Specialist Qualifications on the QCF</b>	<b>BTEC qualification suites on the QCF</b>
<b>BTEC Level 2 Qualifications</b> BTEC Award, Certificate, Extended Certificate and Diploma	<b>2</b>	<b>BTEC Level 2 Specialist Qualifications</b> BTEC Level 2 Award, Certificate, Extended Certificate and Diploma	<b>BTEC Level 2 Firsts</b> BTEC Level 2 Certificate, Extended Certificate and Diploma
<b>BTEC Level 1 Qualifications</b> BTEC Award, Certificate, Extended Certificate and Diploma	<b>1</b>	<b>BTEC Level 1 Specialist Qualifications</b> BTEC Level 1 Award, Certificate, Extended Certificate and Diploma	<b>BTEC Level 1 Qualifications</b> BTEC Level 1 Award, Certificate and Diploma (vocational component of Foundation Learning)
	<b>E</b>	<b>BTEC Entry Level Specialist Qualifications</b> BTEC Entry Level Award, Certificate, Extended Certificate and Diploma	<b>BTEC Entry Level Qualifications (E3)</b> BTEC Entry Level 3 Award, Certificate and Diploma (vocational component of Foundation Learning)

**NQF** = National Qualifications Framework

**QCF** = Qualifications and Credit Framework

For most qualifications on the **NQF**, the accreditation end date is normally 31 August 2010 or 31 December 2010.

For qualifications on the **QCF**, the accreditation start date is usually 1 September 2010 or 1 January 2011.

<b>QCF qualification sizes</b>	
<b>Award</b>	1-12 credits
<b>Certificate</b>	13-36 credits
<b>Diploma</b>	37+ credits

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For more information on Edexcel and BTEC qualifications please  
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