Pearson Edexcel Diplomas for Information Technology and Telecommunications Professionals at SCQF Level 5, 6 and 8

Specification

First registration September 2013

Issue 2

This is an updated version of the specification.

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

All information in this specification is correct at time of going to publication.

Contents

Purpose of this specification

This specification sets out:

- the objectives of the qualifications

- any other qualification that a learner must have completed before taking this qualifications

- any prior knowledge, skills or understanding which the learner is required to have before taking these qualifications

- the combination of units that a learner must have completed before the qualification will be awarded and any pathways

- 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 qualifications

- the method of any assessment and any associated requirements relating to it

- the criteria against which a learner's level of attainment will be measured (such as assessment criteria)

- assessment requirements and/or evidence requirements required as specified by the relevant Sector Skills Council/Standards Setting Body

- assessment requirements/strategy as published by the relevant Sector Skills Council/Standards Setting Body

- the Apprenticeship Framework in which the qualifications are included.

1   Introducing Edexcel Competence-based qualifications

What are Competence-based qualifications?

Competence-based qualifications reflect the skills and knowledge needed to do a job effectively. They are work-based qualifications that give learners the opportunity to demonstrate their competence in the area of work or job role to which the qualification relates.

Competence-based qualifications are outcomes-based with no fixed learning programme, allowing flexibility in their delivery to meet the individual learner's needs. The qualifications are based on the National Occupational Standards (NOS) for the sector, which define what employees, or potential employees, must be able to do and know, and how well they should undertake work tasks and work roles.

Most Competence-based qualifications form the competence component of Apprenticeship Frameworks. They are suitable for those in employment or those who are studying at college and have a part-time job or access to a substantial work placement.

Most learners will work towards their qualification in the workplace or in settings that replicate the working environment as specified in the assessment requirements/strategy for the sector. Colleges, training centres and/or employers can offer these qualifications provided they have access to appropriate physical and human resources.

Every unit and qualification in the SCQF has a credit value.

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

2 Qualification summary and key information

Qualification title	Pearson Edexcel Diploma for Information Technology and Telecommunications Professionals at SCQF Level 5
SQA Accreditation Number	R412 04
Qualification framework	SCQF
Accreditation start date	08/10/2014
Accreditation end date	31/03/2018
Certification end date	31/03/2020
Recommended ages	16–18 18+ However, this qualification is open to any candidates working in relevant jobs.
Credit value	60
Assessment	Portfolio of Evidence (internal assessment).
Grading information	The qualification and units are graded pass/fail.
Entry requirements	Candidates must be in work in order to register for this qualification, so that evidence is genuine work-based evidence. However, centres must follow the Pearson Access and Recruitment policy (see *Section 9, Access and Recruitment*).

Qualification title	Pearson Edexcel Diploma for Information Technology and Telecommunications Professionals at SCQF Level 6
SQA Accreditation Number	R327 04
Qualification framework	SCQF
Accreditation start date	01/08/2013
Accreditation end date	31/03/2018
Certification end date	31/03/2020
Recommended ages	16–18 18+ However, this qualification is open to any candidates working in relevant jobs.
Credit value	96
Assessment	Portfolio of Evidence (internal assessment).
Grading information	The qualification and units are graded pass/fail.
Entry requirements	Candidates must be in work in order to register for this qualification, so that evidence is genuine work-based evidence. However, centres must follow the Pearson Access and Recruitment policy (see *Section 9, Access and Recruitment*).

Qualification title	Pearson Edexcel Diploma for Information Technology and Telecommunications Professionals at SCQF Level 8
SQA Accreditation Number	R413 04
Qualification framework	SCQF
Accreditation start date	08/10/2014
Accreditation end date	31/03/2018
Certification end date	31/03/2020
Recommended ages	16–18 18+ However, this qualification is open to any candidates working in relevant jobs.
Credit value	150
Assessment	Portfolio of Evidence (internal assessment).
Grading information	The qualification and units are graded pass/fail.
Entry requirements	Candidates must be in work in order to register for this qualification, so that evidence is genuine work-based evidence. However, centres must follow the Pearson Access and Recruitment policy (see *Section 9, Access and Recruitment*).

Qualification objectives

The Pearson BTEC Diplomas for Information Technology and Telecommunications Professionals at SCQF Level 5, 6 and 8 is for learners who work in, or intend to work in the IT and Telecoms sector. It assesses work-based competence, together with underpinning knowledge and understanding, to enable learners to progress in the world of work.

It gives learners the opportunity to:

- demonstrate competence in IT and Telecoms

- develop knowledge and skills related to the specified job roles in the IT and Telecoms sector

- have existing skills recognised

- achieve a nationally-recognised SCQF Level 5, 6 or 8 qualification

- develop their own personal growth and engagement in learning.

The Pearson BTEC Diplomas for Information Technology and Telecommunications Professionals at SCQF Level 5 and 6 are primarily designed for work-based learners undertaking an IT and Telecommunications Professional Modern Apprenticeship as a computer hardware engineer, computer service technician, internet/web developer or professional telecommunications apprentice technician. The Diploma assesses work-based competence, together with underpinning knowledge and understanding, to enable learners to progress their IT career in the world of work.

The Diploma for Information Technology and Telecommunications Professionals at SCQF Level 8 is primarily designed for work-based learners undertaking a Technical Apprenticeship in IT and Telecommunications. Learners will acquire skills, knowledge and understanding in networking, system maintenance, customer requirements, application software, programming, health and safety regulations, and organisational requirements. It is intended for people in roles in which IT practice, support or direction is the major focus of the job. The Diploma is suitable for those with prior experience in IT who are able to operate with some autonomy, or who are taking responsibility for the work of others. Learners will be able to manage IT software and hardware with confidence in the areas they have studied.

Suitable roles include business analyst, computer games designer, internet/web professional, IT product developer or telecommunications technician.

Relationship with previous qualifications

These are new Pearson qualifications.

Apprenticeships

e-skills UK include the Pearson Edexcel Diploma for Information Technology and Telecommunications Professionals at SCQF Level 5, 6 and 8 as the combined knowledge and competence components for the Scottish Modern Apprenticeship Framework.

Progression opportunities through Pearson qualifications

Learners who have achieved the Pearson Edexcel Diploma for Information Technology and Telecommunications Professionals at SCQF Level 5 can progress to:

- the Pearson Edexcel Diploma for IT and Telecommunications Professionals at SCQF Level 6

- an HNC/HND in Computing or related area

- a more advanced role in the IT sector.

Learners who have achieved the Pearson Edexcel Diploma for Information Technology and Telecommunications Professionals at SCQF Level 6 can progress to:

- the Pearson Edexcel Diploma for IT and Telecommunications Professionals at SCQF Level 8

- an HNC/HND in Computing or related area

- a more advanced role in the IT.

Learners who have achieved the Pearson Edexcel Diploma for Information Technology and Telecommunications Professionals at SCQF Level 8 can progress to employment in the IT sector at an advanced level.

Industry support and recognition

These qualifications are supported by e-skills UK, the Sector Skills Council for IT and Telecoms. The following employers/training organisations are members of the steering group for the development and have indicated their support for the development:

- BT

- HP

- IBM

- Motherwell College

- PD Solutions

- QA

- Youtrain

- Microsoft

- Capgemini.

Relationship with National Occupational Standards

These qualifications are based on the National Occupational Standards (NOS) in Professional Competence and IT User Skills, which were set and designed by e-skills UK, the Sector Skills Council for IT and Telecoms.

3 Qualification structures

Pearson Edexcel Diploma for Information Technology and Telecommunications Professionals at SCQF Level 5

The learner will need to meet the requirements outlined in the table below before the qualification can be awarded.

Minimum number of credits that must be achieved	60
Minimum number of credits that must be achieved at Level 5 or above	36
Learners must achieve the two mandatory units (7 credits), one of the restricted optional units (either 6 or 7 credits) and then complete a minimum of 17 credits from Group A. The remaining credits may be achieved from either: 1. Group B only, OR 2. Group B and Group C (maximum of 8 credits from Group C).	

Unit	Unit reference number	Mandatory units – learners must complete both units from this group	Level	Credit	Unit number
PE1	H3C3 04	Personal Effectiveness 1	5	6	1
HS	UC29 04	Health and Safety in IT and Telecoms	4	1	4
Unit	**Unit reference number**	**Restricted optional units – learners must complete one unit from this group**	**Level**	**Credit**	**Unit number**
IWC1	H39H 04	Interpersonal and Written Communication 1	5	6	5
CC1	H39L 04	Customer Care for IT and Telecoms Professionals 1	5	7	8
Unit	**Unit reference number**	**Group A – learners must complete at least 17 credits from these work-based optional units but no more than one from each family of units.**	**Level**	**Credit**	**Unit number**
OPS1	UC32 04	IT and Telecom System Operations 1	5	9	11
OPS2	UC33 04	IT and Telecom System Operations 2	6	12	12
OPS3	UC34 04	IT and Telecom System Operations 3	7	14	13
SM1	UC35 04	IT and Telecom System Management 1	5	7	14

Unit	Unit reference number	Group A – learners must complete at least 17 credits from these work-based optional units but no more than one from each family of units.	Level	Credit	Unit number
SM2	UC36 04	IT and Telecom System Management 2	6	12	15
SM3	UC37 04	IT and Telecom System Management 3	8	15	16
MSD1	UC38 04	Managing Software Development 1	7	15	17
MSD2	UC39 04	Managing Software Development 2	8	20	18
EDP1	UC40 04	Event Driven Computer Programming 1	5	8	19
EDP2	UC41 04	Event Driven Computer Programming 2	6	12	20
EDP3	UC42 04	Event Driven Computer Programming 3	8	20	21
OOP1	UC43 04	Object Oriented Computer Programming 1	5	8	22
OOP2	UC44 04	Object Oriented Computer Programming 2	6	12	23
OOP3	UC45 04	Object Oriented Computer Programming 3	8	20	24
PP1	UC46 04	Procedural Programming 1	5	8	25
PP2	UC47 04	Procedural Programming 2	6	12	26
PP3	UC48 04	Procedural Programming 3	8	20	27
IDR1	UC49 04	Investigating and Defining Customer Requirements for IT and Telecoms Systems 1	5	9	28
IDR2	UC50 04	Investigating and Defining Customer Requirements for IT and Telecoms Systems 2	6	12	29
IDR3	UC51 04	Investigating and Defining Customer Requirements for IT and Telecoms Systems 3	8	15	30
RS1	UC52 04	Remote Support for IT and Telecoms Products or Services 1	5	6	31
RS2	UC53 04	Remote Support for IT and Telecoms Products or Services 2	6	9	32
RS3	UC54 04	Remote Support for IT and Telecoms Products or Services 3	8	12	33
TFD1	UC55 04	IT and Telecoms Fault Diagnosis 1	5	6	34
TFD2	UC56 04	IT and Telecoms Fault Diagnosis 2	7	8	35
TFD3	UC57 04	IT and Telecoms Fault Diagnosis 3	8	12	36

Unit	Unit reference number	Group A – learners must complete at least 17 credits from these work-based optional units but no more than one from each family of units.	Level	Credit	Unit number
TEST 1	UC58 04	Testing IT and Telecoms Systems 1	5	6	37
TEST 2	UC59 04	Testing IT and Telecoms Systems 2	6	12	38
TEST 3	UC60 04	Testing IT and Telecoms Systems 3	8	15	39
UPA	UC61 04	User Profile Administration	6	3	40
SEC1	UC62 04	IT and Telecom System Security 1	5	4	41
SEC2	UC63 04	IT and Telecom System Security 2	6	8	42
SEC3	UC64 04	IT and Telecom System Security 3	8	12	43
TAG1	UC65 04	Technical Advice and Guidance 1	5	4	44
TAG2	UC66 04	Technical Advice and Guidance 2	7	7	45
TAG3	UC67 04	Technical Advice and Guidance 3	8	12	46
WHE1	UC68 04	Working with IT and Telecoms Hardware and Equipment 1	5	7	47
WHE2	UC69 04	Working with IT and Telecoms Hardware and Equipment 2	6	10	48
WHE3	UC70 04	Working with IT and Telecoms Hardware and Equipment 3	8	14	49
Unit	Unit reference number	Group B – learners may choose to complete any of these knowledge units but no more than one from each family of units.	Level	Credit	Unit number
DRM1	UC71 04	Data Representation and Manipulation for IT and Telecoms 1	5	8	50
DRM2	UC72 04	Data Representation and Manipulation for IT and Telecoms 2	6	8	51
DM1	UC73 04	Data Modelling 1	5	4	52
DM2	UC74 04	Data Modelling 2	6	6	53
CGD1	UC75 04	Computer Games Development 1	5	4	54
CGD2	UC76 04	Computer Games Development 2	6	7	55
SA1	UC77 04	System Architecture 1	5	6	56
SA2	UC78 04	System Architecture 2	6	8	57
SA3	UC79 04	System Architecture 3	7	8	58

Unit	Unit reference number	Group B – learners may choose to complete any of these knowledge units but no more than one from each family of units.	Level	Credit	Unit number
WD1	UC80 04	Web Development 1	5	7	59
WD2	UC81 04	Web Development 2	6	12	60
WD3	UC82 04	Web Development 3	7	15	61
ITSD	UC83 04	Introduction to IT and Telecoms Systems Development	5	6	62
SDF	UC84 04	Software Design Fundamentals	7	8	63
NET1	UC85 04	Networking Principles 1	5	6	64
NET2	UC86 04	Networking Principles 2	6	10	65
TP1	UC87 04	Telecommunications Principles 1	5	7	66
TP2	UC88 04	Telecommunications Principles 2	7	10	67
FIBRE	UC89 04	Fibre Telecommunications Techniques	6	15	68
Unit	Unit reference number	Group C (max 8 credits) – learners may choose to complete any of these ITQ units but no more than one from each family of units.	Level	Credit	Unit number
INT1	UC90 04	Using the Internet 1	4	3	69
INT2	UC91 04	Using the Internet 2	5	4	70
INT3	UC92 04	Using the Internet 3	6	5	71
EML1	UC93 04	Using Email 1	4	2	72
EML2	UC94 04	Using Email 2	5	3	73
EML3	UC95 04	Using Email 3	6	3	74
UCT1	UC96 04	Using Collaborative Technologies 1	4	3	75
UCT2	UC97 04	Using Collaborative Technologies 2	5	4	76
UCT3	UC98 04	Using Collaborative Technologies 3	6	6	77
UMD1	UC99 04	Using Mobile IT Devices 1	4	2	78
UMD2	UD01 04	Using Mobile IT Devices 2	5	2	79
PIM1	UD02 04	Personal Information Management Software 1	4	2	80
PIM2	UD03 04	Personal Information Management Software 2	5	2	81
ISF: FS1	UD04 04	IT Software Fundamentals 1	4	3	82

Unit	Unit reference number	Group C (max 8 credits) – learners may choose to complete any of these ITQ units but no more than one from each family of units.	Level	Credit	Unit number
ISF: FS2	UD05 04	IT Software Fundamentals 2	5	3	83
AV1	UD06 04	Audio Software 1	4	2	84
AV2	UD07 04	Audio Software 2	5	3	85
AV3	UD08 04	Audio Software 3	6	4	86
AV1	UD09 04	Video Software 1	4	2	87
AV2	UD10 04	Video Software 2	5	3	88
AV3	UD11 04	Video Software 3	6	4	89
DB1	UD12 04	Database Software 1	4	3	90
DB2	UD13 04	Database Software 2	5	4	91
DB3	UD14 04	Database Software 3	6	6	92
DS1	UD15 04	Design Software 1	4	3	93
DS2	UD16 04	Design Software 2	5	4	94
DS3	UD17 04	Design Software 3	6	5	95
IS1	UD18 04	Imaging Software 1	4	3	96
IS2	UD19 04	Imaging Software 2	5	4	97
IS3	UD20 04	Imaging Software 3	6	5	98
DTP1	UD21 04	Desktop Publishing Software 1	4	3	99
DTP2	UD22 04	Desktop Publishing Software 2	5	4	100
DTP3	UD23 04	Desktop Publishing Software 3	6	5	101
DPS1	UD24 04	Drawing and Planning Software 1	4	2	102
DPS2	UD25 04	Drawing and Planning Software 2	5	3	103
DPS3	UD26 04	Drawing and Planning Software 3	6	4	104
MM1	UD27 04	Multimedia Software 1	4	3	105
MM2	UD28 04	Multimedia Software 2	5	4	106
MM3	UD29 04	Multimedia Software 3	6	6	107
PS1	UD30 04	Presentation Software 1	4	3	108
PS2	UD31 04	Presentation Software 2	5	4	109
PS3	UD32 04	Presentation Software 3	6	6	110
PM1	UD33 04	Project Management Software 1	4	3	111

Unit	Unit reference number	Group C (max 8 credits) – learners may choose to complete any of these ITQ units but no more than one from each family of units.	Level	Credit	Unit number
PM2	UD34 04	Project Management Software 2	5	4	112
PM3	UD35 04	Project Management Software 3	6	5	113
BS1	UD36 04	Bespoke Software 1	4	2	114
BS2	UD37 04	Bespoke Software 2	5	3	115
BS3	UD38 04	Bespoke Software 3	6	4	116
BS1	UD39 04	Specialist Software 1	4	2	117
BS2	UD40 04	Specialist Software 2	5	3	118
BS3	UD41 04	Specialist Software 3	6	4	119
SS1	UD42 04	Spreadsheet Software 1	4	3	120
SS2	UD43 04	Spreadsheet Software 2	5	4	121
SS3	UD44 04	Spreadsheet Software 3	6	6	122
WS1	UD45 04	Website Software 1	4	3	123
WS2	UD46 04	Website Software 2	5	4	124
WS3	UD47 04	Website Software 3	6	5	125
WP1	UD48 04	Word Processing Software 1	4	3	126
WP2	UD49 04	Word Processing Software 2	5	4	127
WP3	UD50 04	Word Processing Software 3	6	6	128

Pearson Edexcel Diploma for Information Technology and Telecommunications Professionals at SCQF Level 6

The learner will need to meet the requirements outlined in the table below before the qualification can be awarded.

Minimum number of credits that must be achieved	96
Minimum number of credits that must be achieved at Level 6 or above	58

Learners must achieve the two mandatory units (10 credits), one of the restricted optional units (either 9 or 10 credits) and then complete a minimum of 29 credits from Group A. The remaining credits may be achieved from either:

1. Group B only, OR

2. Group B and Group C (maximum of 12 credits from Group C); OR

3. Group B and Group D (maximum of 20 credits from Group D); OR

4. Group B and Group C (maximum of 12 credits from Group C) and Group D (maximum of 20 credits from Group D)

Unit	Unit reference number	Mandatory units – learners must complete both units from this group	Level	Credit	Unit number
PE2	UC28 04	Personal Effectiveness 2	6	9	2
HS	UC29 04	Health and Safety in IT and Telecoms	4	1	4
Unit	**Unit reference number**	**Restricted optional units – learners must complete one unit from this group**	**Level**	**Credit**	**Unit number**
IWC2	UC30 04	Interpersonal and Written Communication 2	6	9	6
CC2	UC31 04	Customer Care for IT and Telecoms Professionals 2	6	10	9
Unit	**Unit reference number**	**Group A – learners must complete at least 29 credits from these work-based optional units but no more than one from each family of units.**	**Level**	**Credit**	**Unit number**
OPS1	UC32 04	IT and Telecom System Operations 1	5	9	11
OPS2	UC33 04	IT and Telecom System Operations 2	6	12	12
OPS3	UC34 04	IT and Telecom System Operations 3	7	14	13
SM1	UC35 04	IT and Telecom System Management 1	5	7	14

Unit	Unit reference number	Group A – learners must complete at least 29 credits from these work-based optional units but no more than one from each family of units.	Level	Credit	Unit number
SM2	UC36 04	IT and Telecom System Management 2	6	12	15
SM3	UC37 04	IT and Telecom System Management 3	8	15	16
MSD1	UC38 04	Managing Software Development 1	7	15	17
MSD2	UC39 04	Managing Software Development 2	8	20	18
EDP1	UC40 04	Event Driven Computer Programming 1	5	8	19
EDP2	UC41 04	Event Driven Computer Programming 2	6	12	20
EDP3	UC42 04	Event Driven Computer Programming 3	8	20	21
OOP1	UC43 04	Object Oriented Computer Programming 1	5	8	22
OOP2	UC44 04	Object Oriented Computer Programming 2	6	12	23
OOP3	UC45 04	Object Oriented Computer Programming 3	8	20	24
PP1	UC46 04	Procedural Programming 1	5	8	25
PP2	UC47 04	Procedural Programming 2	6	12	26
PP3	UC48 04	Procedural Programming 3	8	20	27
IDR1	UC49 04	Investigating and Defining Customer Requirements for IT and Telecoms Systems 1	5	9	28
IDR2	UC50 04	Investigating and Defining Customer Requirements for IT and Telecoms Systems 2	6	12	29
IDR3	UC51 04	Investigating and Defining Customer Requirements for IT and Telecoms Systems 3	8	15	30
RS1	UC52 04	Remote Support for IT and Telecoms Products or Services 1	5	6	31
RS2	UC53 04	Remote Support for IT and Telecoms Products or Services 2	6	9	32
RS3	UC54 04	Remote Support for IT and Telecoms Products or Services 3	8	12	33
TFD1	UC55 04	IT and Telecoms Fault Diagnosis 1	5	6	34
TFD2	UC56 04	IT and Telecoms Fault Diagnosis 2	7	8	35
TFD3	UC57 04	IT and Telecoms Fault Diagnosis 3	8	12	36

Unit	Unit reference number	Group A – learners must complete at least 29 credits from these work-based optional units but no more than one from each family of units.	Level	Credit	Unit number
TEST1	UC58 04	Testing IT and Telecoms Systems 1	5	6	37
TEST2	UC59 04	Testing IT and Telecoms Systems 2	6	12	38
TEST3	UC60 04	Testing IT and Telecoms Systems 3	8	15	39
UPA	UC61 04	User Profile Administration	6	3	40
SEC1	UC62 04	IT and Telecom System Security 1	5	4	41
SEC2	UC63 04	IT and Telecom System Security 2	6	8	42
SEC3	UC64 04	IT and Telecom System Security 3	8	12	43
TAG1	UC65 04	Technical Advice and Guidance 1	5	4	44
TAG2	UC66 04	Technical Advice and Guidance 2	7	7	45
TAG3	UC67 04	Technical Advice and Guidance 3	8	12	46
WHE1	UC68 04	Working with IT and Telecoms Hardware and Equipment 1	5	7	47
WHE2	UC69 04	Working with IT and Telecoms Hardware and Equipment 2	6	10	48
WHE3	UC70 04	Working with IT and Telecoms Hardware and Equipment 3	8	14	49
Unit	Unit reference number	Group B – learners may choose to complete any of these knowledge units but no more than one from each family of units.	Level	Credit	Unit number
DRM1	UC71 04	Data Representation and Manipulation for IT and Telecoms 1	5	8	50
DRM2	UC72 04	Data Representation and Manipulation for IT and Telecoms 2	6	8	51
DM1	UC73 04	Data Modelling 1	5	4	52
DM2	UC74 04	Data Modelling 2	6	6	53
CGD1	UC75 04	Computer Games Development 1	5	4	54
CGD2	UC76 04	Computer Games Development 2	6	7	55
SA1	UC77 04	System Architecture 1	5	6	56
SA2	UC78 04	System Architecture 2	6	8	57
SA3	UC79 04	System Architecture 3	7	8	58

Unit	Unit reference number	Group B – learners may choose to complete <u>any</u> of these knowledge units but no more than one from each family of units.	Level	Credit	Unit number
WD1	UC80 04	Web Development 1	5	7	59
WD2	UC81 04	Web Development 2	6	12	60
WD3	UC82 04	Web Development 3	7	15	61
ITSD	UC83 04	Introduction to IT and Telecoms Systems Development	5	6	62
SDF	UC84 04	Software Design Fundamentals	7	8	63
NET1	UC85 04	Networking Principles 1	5	6	64
NET2	UC86 04	Networking Principles 2	6	10	65
TP1	UC87 04	Telecommunications Principles 1	5	7	66
TP2	UC88 04	Telecommunications Principles 2	7	10	67
FIBRE	UC89 04	Fibre Telecommunications Techniques	6	15	68
Unit	Unit reference number	Group C (maximum12 credits) – learners may choose to complete <u>any</u> of these ITQ units but no more than one from each family of units.	Level	Credit	Unit number
INT1	UC90 04	Using the Internet 1	4	3	69
INT2	UC91 04	Using the Internet 2	5	4	70
INT3	UC92 04	Using the Internet 3	6	5	71
EML1	UC93 04	Using Email 1	4	2	72
EML2	UC94 04	Using Email 2	5	3	73
EML3	UC95 04	Using Email 3	6	3	74
UCT1	UC96 04	Using Collaborative Technologies 1	4	3	75
UCT2	UC97 04	Using Collaborative Technologies 2	5	4	76
UCT3	UC98 04	Using Collaborative Technologies 3	6	6	77
UMD1	UC99 04	Using Mobile IT Devices 1	4	2	78
UMD2	UD01 04	Using Mobile IT Devices 2	5	2	79
PIM1	UD02 04	Personal Information Management Software 1	4	2	80
PIM2	UD03 04	Personal Information Management Software 2	5	2	81
ISF: FS1	UD04 04	IT Software Fundamentals 1	4	3	82

Unit	Unit reference number	Group C (maximum 12 credits) – learners may choose to complete any of these ITQ units but no more than one from each family of units.	Level	Credit	Unit number
ISF: FS2	UD05 04	IT Software Fundamentals 2	5	3	83
AV1	UD06 04	Audio Software 1	4	2	84
AV2	UD07 04	Audio Software 2	5	3	85
AV3	UD08 04	Audio Software 3	6	4	86
AV1	UD09 04	Video Software 1	4	2	87
AV2	UD10 04	Video Software 2	5	3	88
AV3	UD11 04	Video Software 3	6	4	89
DB1	UD12 04	Database Software 1	4	3	90
DB2	UD13 04	Database Software 2	5	4	91
DB3	UD14 04	Database Software 3	6	6	92
DS1	UD15 04	Design Software 1	4	3	93
DS2	UD16 04	Design Software 2	5	4	94
DS3	UD17 04	Design Software 3	6	5	95
IS1	UD18 04	Imaging Software 1	4	3	96
IS2	UD19 04	Imaging Software 2	5	4	97
IS3	UD20 04	Imaging Software 3	6	5	98
DTP1	UD21 04	Desktop Publishing Software 1	4	3	99
DTP2	UD22 04	Desktop Publishing Software 2	5	4	100
DTP3	UD23 04	Desktop Publishing Software 3	6	5	101
DPS1	UD24 04	Drawing and Planning Software 1	4	2	102
DPS2	UD25 04	Drawing and Planning Software 2	5	3	103
DPS3	UD26 04	Drawing and Planning Software 3	6	4	104
MM1	UD27 04	Multimedia Software 1	4	3	105
MM2	UD28 04	Multimedia Software 2	5	4	106
MM3	UD29 04	Multimedia Software 3	6	6	107
PS1	UD30 04	Presentation Software 1	4	3	108
PS2	UD31 04	Presentation Software 2	5	4	109
PS3	UD32 04	Presentation Software 3	6	6	110
PM1	UD33 04	Project Management Software 1	4	3	111

Unit	Unit reference number	Group C (maximum 12 credits) – learners may choose to complete any of these ITQ units but no more than one from each family of units.	Level	Credit	Unit number
PM2	UD34 04	Project Management Software 2	5	4	112
PM3	UD35 04	Project Management Software 3	6	5	113
BS1	UD36 04	Bespoke Software 1	4	2	114
BS2	UD37 04	Bespoke Software 2	5	3	115
BS3	UD38 04	Bespoke Software 3	6	4	116
BS1	UD39 04	Specialist Software 1	4	2	117
BS2	UD40 04	Specialist Software 2	5	3	118
BS3	UD41 04	Specialist Software 3	6	4	119
SS1	UD42 04	Spreadsheet Software 1	4	3	120
SS2	UD43 04	Spreadsheet Software 2	5	4	121
SS3	UD44 04	Spreadsheet Software 3	6	6	122
WS1	UD45 04	Website Software 1	4	3	123
WS2	UD46 04	Website Software 2	5	4	124
WS3	UD47 04	Website Software 3	6	5	125
WP1	UD48 04	Word Processing Software 1	4	3	126
WP2	UD49 04	Word Processing Software 2	5	4	127
WP3	UD50 04	Word Processing Software 3	6	6	128
Unit	Unit reference number	Group D – learners may choose a maximum of 20 credits from this group (i.e. a maximum of 20 credits will count towards achieving the qualification)	Level	Credit	Unit number
CAL	UD73 04	Customer Apparatus and Line Installation	5	22	129
HSE	UD74 04	Health and Safety in the Engineering Workplace	6	11	130
PI1	UD75 04	Presenting Information Using ICT	5	8	131

Pearson Edexcel Diploma for Information Technology and Telecommunications Professionals at SCQF Level 8

The learner will need to meet the requirements outlined in the table below before the qualification can be awarded.

Minimum number of credits that must be achieved	150
Minimum number of credits that must be achieved at Level 8.	90
Learners must achieve the two mandatory units (16 credits), one of the restricted optional units (12 credits) and then complete a minimum of 47 credits from Group A. The remaining credits may be achieved from either: 1. Group B only, OR 2. Group B and Group C (maximum of 12 credits from Group C).	

Unit	Unit reference number	Mandatory units – learners must complete both units from this group	Level	Credit	Unit number
PE3	H39F 04	Personal Effectiveness 3	8	15	3
HS	UC29 04	Health and Safety in IT and Telecoms	4	1	4
Unit	**Unit reference number**	**Restricted optional units – learners must complete one unit from this group**	**Level**	**Credit**	**Unit number**
IWC3	H39K 04	Interpersonal and Written Communication 3	8	12	7
CC3	H39N 04	Customer Care for IT and Telecoms Professionals 3	8	12	10
Unit	**Unit reference number**	**Group A – learners must complete at least 47 credits from these work-based optional units but no more than one from each family of units.**	**Level**	**Credit**	**Unit number**
OPS1	UC32 04	IT and Telecom System Operations 1	5	9	11
OPS2	UC33 04	IT and Telecom System Operations 2	6	12	12
OPS3	UC34 04	IT and Telecom System Operations 3	7	14	13
SM1	UC35 04	IT and Telecom System Management 1	5	7	14

Unit	Unit reference number	Group A – learners must complete at least 47 credits from these work-based optional units but no more than one from each family of units.	Level	Credit	Unit number
SM2	UC36 04	IT and Telecom System Management 2	6	12	15
SM3	UC37 04	IT and Telecom System Management 3	8	15	16
MSD1	UC38 04	Managing Software Development 1	7	15	17
MSD2	UC39 04	Managing Software Development 2	8	20	18
EDP1	UC40 04	Event Driven Computer Programming 1	5	8	19
EDP2	UC41 04	Event Driven Computer Programming 2	6	12	20
EDP3	UC42 04	Event Driven Computer Programming 3	8	20	21
OOP1	UC43 04	Object Oriented Computer Programming 1	5	8	22
OOP2	UC44 04	Object Oriented Computer Programming 2	6	12	23
OOP3	UC45 04	Object Oriented Computer Programming 3	8	20	24
PP1	UC46 04	Procedural Programming 1	5	8	25
PP2	UC47 04	Procedural Programming 2	6	12	26
PP3	UC48 04	Procedural Programming 3	8	20	27
IDR1	UC49 04	Investigating and Defining Customer Requirements for IT and Telecoms Systems 1	5	9	28
IDR2	UC50 04	Investigating and Defining Customer Requirements for IT and Telecoms Systems 2	6	12	29
IDR3	UC51 04	Investigating and Defining Customer Requirements for IT and Telecoms Systems 3	8	15	30
RS1	UC52 04	Remote Support for IT and Telecoms Products or Services 1	5	6	31
RS2	UC53 04	Remote Support for IT and Telecoms Products or Services 2	6	9	32
RS3	UC54 04	Remote Support for IT and Telecoms Products or Services 3	8	12	33
TFD1	UC55 04	IT and Telecoms Fault Diagnosis 1	5	6	34
TFD2	UC56 04	IT and Telecoms Fault Diagnosis 2	7	8	35
TFD3	UC57 04	IT and Telecoms Fault Diagnosis 3	8	12	36

Unit	Unit reference number	Group A – learners must complete at least 47 credits from these work-based optional units but no more than one from each family of units.	Level	Credit	Unit number
TEST1	UC58 04	Testing IT and Telecoms Systems 1	5	6	37
TEST2	UC59 04	Testing IT and Telecoms Systems 2	6	12	38
TEST3	UC60 04	Testing IT and Telecoms Systems 3	8	15	39
UPA	UC61 04	User Profile Administration	6	3	40
SEC1	UC62 04	IT and Telecom System Security 1	5	4	41
SEC2	UC63 04	IT and Telecom System Security 2	6	8	42
SEC3	UC64 04	IT and Telecom System Security 3	8	12	43
TAG1	UC65 04	Technical Advice and Guidance 1	5	4	44
TAG2	UC66 04	Technical Advice and Guidance 2	7	7	45
TAG3	UC67 04	Technical Advice and Guidance 3	8	12	46
WHE1	UC68 04	Working With IT and Telecoms Hardware and Equipment 1	5	7	47
WHE2	UC69 04	Working With IT and Telecoms Hardware and Equipment 2	6	10	48
WHE3	UC70 04	Working With IT and Telecoms Hardware and Equipment 3	8	14	49
Unit	Unit reference number	Group B – learners may choose to complete any of these knowledge units but no more than one from each family of units.	Level	Credit	Unit number
DRM1	UC71 04	Data Representation and Manipulation for IT and Telecoms 1	5	8	50
DRM2	UC72 04	Data Representation and Manipulation for IT and Telecoms 2	6	8	51
DM1	UC73 04	Data Modelling 1	5	4	52
DM2	UC74 04	Data Modelling 2	6	6	53
CGD1	UC75 04	Computer Games Development 1	5	4	54
CGD2	UC76 04	Computer Games Development 2	6	7	55
SA1	UC77 04	System Architecture 1	5	6	56
SA2	UC78 04	System Architecture 2	6	8	57
SA3	UC79 04	System Architecture 3	7	8	58

Unit	Unit reference number	Group B – learners may choose to complete any of these knowledge units but no more than one from each family of units.	Level	Credit	Unit number
WD1	UC80 04	Web Development 1	5	7	59
WD2	UC81 04	Web Development 2	6	12	60
WD3	UC82 04	Web Development 3	7	15	61
ITSD	UC83 04	Introduction to IT and Telecoms Systems Development	5	6	62
SDF	UC84 04	Software Design Fundamentals	7	8	63
NET1	UC85 04	Networking Principles 1	5	6	64
NET2	UC86 04	Networking Principles 2	6	10	65
TP1	UC87 04	Telecommunications Principles 1	5	7	66
TP2	UC88 04	Telecommunications Principles 2	7	10	67
FIBRE	UC89 04	Fibre Telecommunications Techniques	6	15	68
Unit	Unit reference number	Group C (max 12 credits) – learners may choose to complete any of these ITQ units, but no more than one from each family of units.	Level	Credit	Unit Number
INT1	UC90 04	Using the Internet 1	4	3	69
INT2	UC91 04	Using the Internet 2	5	4	70
INT3	UC92 04	Using the Internet 3	6	5	71
EML1	UC93 04	Using Email 1	4	2	72
EML2	UC94 04	Using Email 2	5	3	73
EML3	UC95 04	Using Email 3	6	3	74
UCT1	UC96 04	Using Collaborative Technologies 1	4	3	75
UCT2	UC97 04	Using Collaborative Technologies 2	5	4	76
UCT3	UC98 04	Using Collaborative Technologies 3	6	6	77
UMD1	UC99 04	Using Mobile IT Devices 1	4	2	78
UMD2	UD01 04	Using Mobile IT Devices 2	5	2	79
PIM1	UD02 04	Personal Information Management Software 1	4	2	80
PIM2	UD03 04	Personal Information Management Software 2	5	2	81
ISF: FS1	UD04 04	IT Software Fundamentals 1	4	3	82

Unit	Unit reference number	Group C (maximum 12 credits) – learners may choose to complete **any** of these ITQ units, but no more than one from each family of units.	Level	Credit	Unit number
ISF: FS2	UD05 04	IT Software Fundamentals 2	5	3	83
AV1	UD06 04	Audio Software 1	4	2	84
AV2	UD07 04	Audio Software 2	5	3	85
AV3	UD08 04	Audio Software 3	6	4	86
AV1	UD09 04	Video Software 1	4	2	87
AV2	UD10 04	Video Software 2	5	3	88
AV3	UD11 04	Video Software 3	6	4	89
DB1	UD12 04	Database Software 1	4	3	90
DB2	UD13 04	Database Software 2	5	4	91
DB3	UD14 04	Database Software 3	6	6	92
DS1	UD15 04	Design Software 1	4	3	93
DS2	UD16 04	Design Software 2	5	4	94
DS3	UD17 04	Design Software 3	6	5	95
IS1	UD18 04	Imaging Software 1	4	3	96
IS2	UD19 04	Imaging Software 2	5	4	97
IS3	UD20 04	Imaging Software 3	6	5	98
DTP1	UD21 04	Desktop Publishing Software 1	4	3	99
DTP2	UD22 04	Desktop Publishing Software 2	5	4	100
DTP3	UD23 04	Desktop Publishing Software 3	6	5	101
DPS1	UD24 04	Drawing and Planning Software 1	4	2	102
DPS2	UD25 04	Drawing and Planning Software 2	5	3	103
DPS3	UD26 04	Drawing and Planning Software 3	6	4	104
MM1	UD27 04	Multimedia Software 1	4	3	105
MM2	UD28 04	Multimedia Software 2	5	4	106
MM3	UD29 04	Multimedia Software 3	6	6	107
PS1	UD30 04	Presentation Software 1	4	3	108
PS2	UD31 04	Presentation Software 2	5	4	109
PS3	UD32 04	Presentation Software 3	6	6	110
PM1	UD33 04	Project Management Software 1	4	3	111

Unit	Unit reference number	Group C (max 12 credits) – learners may choose to complete any of these ITQ units but no more than one from each family of units.	Level	Credit	Unit number
PM2	UD34 04	Project Management Software 2	5	4	112
PM3	UD35 04	Project Management Software 3	6	5	113
BS1	UD36 04	Bespoke Software 1	4	2	114
BS2	UD37 04	Bespoke Software 2	5	3	115
BS3	UD38 04	Bespoke Software 3	6	4	116
BS1	UD39 04	Specialist Software 1	4	2	117
BS2	UD40 04	Specialist Software 2	5	3	118
BS3	UD41 04	Specialist Software 3	6	4	119
SS1	UD42 04	Spreadsheet Software 1	4	3	120
SS2	UD43 04	Spreadsheet Software 2	5	4	121
SS3	UD44 04	Spreadsheet Software 3	6	6	122
WS1	UD45 04	Website Software 1	4	3	123
WS2	UD46 04	Website Software 2	5	4	124
WS3	UD47 04	Website Software 3	6	5	125
WP1	UD48 04	Word Processing Software 1	4	3	126
WP2	UD49 04	Word Processing Software 2	5	4	127
WP3	UD50 04	Word Processing Software 3	6	6	128

4 Assessment

These qualifications are assessed through an externally verified Portfolio of Evidence that consists of evidence gathered during the course of the learner's work.

To achieve a pass for the full qualification, the learner must achieve all the required units in the stated qualification structure. Each unit has specified learning outcomes and assessment criteria. To pass each unit the learner must:

- achieve **all** the specified learning outcomes

- satisfy **all** the assessment criteria by providing sufficient and valid evidence for each criterion

- prove that the evidence is their own.

The learner must have an assessment record that identifies the assessment criteria that have been met, and it should be cross-referenced to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment. The unit specification or suitable centre documentation can be used to form an assessment record.

It is important that the evidence provided to meet the assessment criteria of the unit and learning outcomes is:

Valid   relevant to the standards for which competence is claimed

Authentic   produced by the learner

Current   sufficiently recent to create confidence that the same skill, understanding or knowledge persist at the time of the claim

Reliable   indicates that the learner can consistently perform at this level

Sufficient   fully meets the requirements of the standards.

Learners can provide evidence of occupational competence from:

- **current practice** where evidence is generated from a current job role

- a **programme of development** where evidence comes from assessment opportunities built into a learning programme, whether at or away from the workplace. The evidence provided must meet the requirements of the Sector Skills Council's assessment requirements/strategy – See *Annexe A*

- the **Recognition of Prior Learning (RPL)** where a learner can demonstrate that they can meet the assessment criteria within a unit through knowledge, understanding or skills they already possess without undertaking a course of development. They must submit sufficient, reliable, authentic and valid evidence for assessment. Evidence submitted based on RPL should provide confidence that the same level of skill/understanding/knowledge exists at the time of claim as existed at the time the evidence was produced. RPL is acceptable for accrediting a unit, several units, or a whole qualification.

  Further guidance is available in the policy document *Recognition of Prior Learning Policy and Process*, available on our website

- a **combination** of these.

Assessment requirements/strategy

The assessment requirements for these qualifications has been included in *Annexe A*. It sets out the overarching assessment principles and the framework for assessing the qualifications to ensure that they remain valid and reliable. They have been developed by e-skills UK in partnership with employers, training providers, awarding organisations and the regulatory authorities.

Types of evidence

To achieve a unit, the learner must gather evidence that shows that they have met the required standard specified in the assessment criteria. The evidence for this qualification can take a variety of forms as indicated below:

- direct observation of the learner's performance by their assessor (O)

- outcomes from oral or written questioning (QandA)

- products of the learner's work (P)

- personal statements and/or reflective accounts (RA)

- outcomes from simulation, where permitted by the assessment strategy (S)

- professional discussion (PD)

- assignment, project/case studies (A)

- authentic statements/witness testimony (WT)

- expert witness testimony (EWT)

- evidence of Recognition of Prior Learning (RPL).

Learners can use the abbreviations for cross-referencing purposes in their portfolios.

Learners can also use one piece of evidence to prove their knowledge, skills and understanding across different assessment criteria and/or across different units. It is not necessary for learners to have each assessment criterion assessed separately. They should be encouraged to reference evidence to the relevant assessment criteria. Evidence must be available to the assessor, internal verifier and Pearson standards verifier.

Any specific evidence requirements for individual units are stated in the unit introduction for the units in *Section 11*.

There is further guidance about assessment on our website. Please see *Section 12* for details.

Assessment of knowledge

The units within group B of these qualifications consist of knowledge-based learning outcomes and assessment criteria. These units must be assessed in line with e-skills UK assessment strategy/requirements – see *Annexe A*.

Centres need to look closely at the verbs used for each assessment criterion in these units when devising the assessment to ensure that learners can provide evidence with sufficient breadth and depth to meet the requirements. Any assignment brief should indicate clearly, which assessment criteria are being targeted.

Centres are encouraged to give learners realistic scenarios and to maximise the use of practical activities in delivery and assessment. To avoid over-assessment, centres are encouraged to link delivery and assessment across the knowledge-based units.

Credit transfer

Credit transfer describes the process of using a credit or credits awarded in the context of a different qualification or awarded by a different awarding organisation towards the achievement requirements of another qualification. All awarding organisations recognise the credits awarded by all other awarding organisations that operate within the SCQF.

If learners achieve credits with other awarding organisations, they do not need to retake any assessment for the same units. The centre must keep evidence of unit achievement.

5 Centre resource requirements

As part of the approval process, centres must make sure that the resource requirements below are in place before offering the qualifications.

General resource requirements

- Centres must have the appropriate physical resources to support both the delivery and assessment of the qualification. For example, a workplace in line with industry standards, or a Realistic Working Environment (RWE), where permitted (as specified in the assessment requirements/strategy for the sector – see *Annexe A*), equipment, IT, learning materials, teaching rooms.

- Where permitted, RWE must offer the same conditions as the normal day-to-day working environment, with a similar range of demands, pressures and requirements for cost-effective working.

- Centres must meet any specific human and physical resource requirements. Staff assessing learners must meet the occupational competence requirements within the overarching assessment requirements/strategy for the sector – see *Annexe A*.

- There must be systems in place to ensure the continuing professional development for staff delivering the qualification.

- Centres must have appropriate health and safety policies, procedures and practices in place for the delivery of the qualification.

- Centres must deliver the qualifications in accordance with current equality legislation. For further details on Pearson's commitment to the Equality Act 2010, please see *Section 9 Access and recruitment* and *Section 10 Access to qualifications for learners with disabilities or specific needs*. For full details on the Equality Act 2010, please go to the Home Office website, www.gov.uk/government/organisations/home-office

6　Centre recognition and approval

Centre recognition

Centres that have not previously offered Pearson accredited vocational qualifications need to apply for and be granted centre recognition and approval as part of the process for approval to offer individual qualifications.

Existing centres will be given 'automatic approval' for a new qualification if they are already approved for a qualification that is being replaced by a new qualification and the conditions for automatic approval are met.

Guidance on seeking approval to deliver Pearson vocational qualifications is available at www.pearsonwbl.edexcel.com/qualifications-approval.

Approvals agreement

All centres are required to enter into an approval agreement, which is a formal commitment by the head or principal of a centre, to meet all the requirements of the specification and any associated codes, conditions or regulations. Pearson will act to protect the integrity of the awarding of qualifications. If centres do not comply with the agreement, this could result in the suspension of certification or withdrawal of approval.

7   Quality assurance of centres

Quality assurance is at the heart of vocational qualifications. Centres will internally assess Competence-based qualifications using internal quality assurance procedures to ensure standardisation of assessment across all learners. Pearson uses external quality assurance procedures to check that all centres are working to national standards. It gives us the opportunity to identify and provide support, if needed, to safeguard certification. It also allows us to recognise and support good practice.

For the qualifications in this specification, the Pearson quality assurance model is as described below.

Centres offering Pearson competence-based qualifications will usually receive two standards verification visits per year (a total of two days per year). The exact frequency and duration of standards verifier visits must reflect the centre's performance, taking account of the number:

* of assessment sites

* and throughput of learners

* and turnover of assessors

* and turnover of internal verifiers.

For centres offering a full BTEC Apprenticeship (i.e. all elements of the Apprenticeship are delivered with Pearson through registration of learners on a BTEC Apprenticeship framework) a single standards verifier will be allocated to verify all elements of the BTEC Apprenticeship programme. If a centre is also offering stand-alone Competence-based qualifications in the same sector as a full BTEC Apprenticeship, the same standards verifier will be allocated.

In order for certification to be released, confirmation is required that the National Occupational Standards (NOS) for assessment, verification and for the specific occupational sector are being consistently met.

Centres are required to declare their commitment to ensuring quality and to providing appropriate opportunities for learners that lead to valid and accurate assessment outcomes.

For further details, please go to the *Edexcel NVQs, SVQs and competence-based qualifications – Delivery Requirements and Quality Assurance Guidance* on our website, at www.pearsonwbl.edexcel.com/NVQ-competence-based.

8 Programme delivery

Centres are free to offer the qualifications using any mode of delivery (for example full-time, part-time, evening only, distance learning) that meets learners' needs. However, centres must make sure that learners have access to the resources identified in the specification and to the sector specialists delivering and assessing the units. Centres must have due regard to Pearson's policies that may apply to different modes of delivery.

Those planning the programme should aim to address the occupational nature of the qualification by:

- engaging with learners, initially, through planned induction, and subsequently through the involvement of learners in planning for assessment opportunities

- using naturally occurring workplace activities and products to present evidence for assessment against the requirements of the qualification

- developing a holistic approach to assessment by matching evidence to different assessment criteria, learning outcomes and units, as appropriate, thereby reducing the assessment burden on learners and assessors

- taking advantage of suitable digital methods to capture evidence.

9 Access and recruitment

Pearson'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 must ensure that their learner recruitment process is conducted with integrity. This includes ensuring that applicants have appropriate information and advice about the qualification to ensure that it will meet their needs.

Centres should review applicants' prior qualifications and/or experience, considering whether this profile shows that they have the potential to achieve the qualification.

For learners with disabilities and specific needs, this review will need to take account of the support available to them during the delivery and assessment of the qualification. The review must take account of the information and guidance in *Section 10 Access to qualifications for learners with disabilities or specific needs*.

10 Access to qualifications for learners with disabilities or specific needs

Equality and fairness are central to our work. Pearson's Equality Policy requires that all learners should have equal opportunity to access our qualifications and assessments and that our qualifications are awarded in a way that is fair to every learner.

We are committed to making sure that:

- learners with a protected characteristic (as defined by the Equality Act 2010) are not, when they are undertaking one of our qualifications, disadvantaged in comparison to learners who do not share that characteristic

- all learners achieve the recognition they deserve from undertaking a qualification and that this achievement can be compared fairly to the achievement of their peers.

Learners taking a qualification can be assessed in British sign language or Irish sign language where it is permitted for the purpose of reasonable adjustments.

Details on how to make adjustments for learners with protected characteristics are given in the policy document *Reasonable Adjustment and Special Considerations Policy for Edexcel Vocational Qualifications*.

This document is available on our website, at www.edexcel.com/Policies

11 Unit format

Each unit has the following sections.

Unit title

The unit has been accredited by SQA Accreditation and credit rated for the SCQF, and this form of words will appear on the learner's Notification of Performance (NOP).

Unit code

Each unit is assigned a Pearson unit code for internal use.

Unit reference number

Each unit is assigned a unit reference number that appears with the unit title on the SQA database.

SCQF level

The SCQF has 12 levels which provide an indication of the complexity of qualifications and learning programmes. SCQF levels are based on a single set of Level Descriptors that are the common reference points and definitions which provide a way of recognising learning that is outcome-based and quality-assured, irrespective of whether that learning is academic, vocational, non-formal or informal.

SCQF credit value

SCQF credit points are calculated by measuring the 'volume' of an outcome of learning. This is arrived at by estimating the amount of time required by the 'average' learner to achieve the outcomes at a particular level.

One SCQF credit point represents a notional 10 hours of learning time. This is made up of time for teaching, assessment, study and preparation. All units have a credit value. When a learner achieves a unit, they gain the specified number of credit points. The minimum credit value is 1 and credit points can be awarded in whole numbers only.

Unit summary

This gives a summary of what the unit aims to do.

Assessment methodology

This provides a summary of the assessment methodology to be used for the unit.

Assessment requirements/evidence requirements

The SSC/B set the assessment/evidence requirements. Learners must provide evidence according to each of the requirements stated in this section.

Learning outcomes

The learning outcomes of a unit set out what a learner knows, understands or is able to do as the result of a process of learning.

Assessment criteria

The assessment criteria specify the standard required by the learner to achieve the learning outcome.

Units

Unit 1: Personal Effectiveness 1

Unit code: PE1

Unit reference number: H3C3 04

SCQF level: 5

SCQF Credit value: 6

Unit summary

This unit enables learners to develop their personal, professional and team working skills and to improve organisational effectiveness. They will also develop an understanding of IT professional ethics, practice and legislation.

Assessment methodology

This unit must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Develop own personal and professional skills	1.1 Obtain and review feedback from others on performance			
	1.2 Agree personal goals and participate in development activities to meet them			
2 Work as a member of a team to achieve defined goals and implement agreed plans	2.1 Effectively manage own time			
	2.2 Recognise and respect diversity, individual differences and perspectives			
	2.3 Accept and provide feedback in a constructive and considerate manner			
	2.4 Understand the responsibilities of colleagues			
	2.5 Identify obstacles to effective teamwork			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Understand what is meant by professional practice	3.1	Identify what the implications of customer satisfaction are for: • customer retention • working relationships			
		3.2	Identify methods for measuring customer satisfaction levels			
		3.3	Record specified customer satisfaction information			
4	Know the legislative environment relating to IT activities	4.1	Identify the impact on an IT or Telecoms organisation of legislation covering: • Processing of financial transactions • Health and safety • Privacy, confidentiality and security • Copyright and intellectual property rights			
5	Improve organisational effectiveness	5.1	List the aims and objectives of the organisation			
		5.2	State the organisation's brand or image			
		5.3	Identify the organisation's structure, roles and responsibilities			
		5.4	Identify potential improvements to working practices			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 2: Personal Effectiveness 2

Unit code: PE2

Unit reference number: UC28 04

SCQF level: 6

SCQF Credit value: 9

Unit summary

This unit enables learners to develop their personal, professional and team working skills and to improve organisational effectiveness. They will also develop an understanding of IT professional ethics, practice and legislation.

Assessment methodology

This unit must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Develop own personal and professional skills	1.1 Identify own development needs and the activities needed to meet them			
	1.2 Obtain and review feedback from others on performance			
	1.3 Agree personal goals and plan development activities to meet them			
2 Work as a member of a team to achieve defined goals	2.1 Plan and manage own time to meet team objectives			
	2.2 Recognise and respect diversity, individual differences and perspectives			
	2.3 Accept and provide feedback in a constructive and considerate manner			
	2.4 Review the responsibilities, interests and concerns of colleagues to reduce obstacles to effective teamwork			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Understand what is meant by professional practice	3.1	Assess the implications for IT and Telecoms professionals of: • Data Protection Act • Computer Misuse Act • Communications Act • Telecommunications (Lawful Business Practice) (Interception of Communications) Regulations			
		3.2	Identify the role of professional bodies for IT and Telecoms, and the benefits of membership to individuals and organisations			
		3.3	Describe quality management systems and standards for systems development			
4	Understand the ethical and legislative environment relating to IT activities	4.1	Describe the impact on the IT and Telecoms activities of your organisation of legislation covering: • Processing of financial transactions • Health and safety • Privacy, confidentiality and security • Copyright and intellectual property rights			
		4.2	Describe the types of conflicts of interest which can arise for IT and Telecoms professionals			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Improve organisational effectiveness	5.1 Describe the aims and objectives of the organisation			
	5.2 Describe the organisation's brand or image and how it can be promoted			
	5.3 Identify the organisation's structure, roles and responsibilities			
	5.4 Identify and justify potential improvements to organisational effectiveness			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 3: Personal Effectiveness 3

Unit code: PE3

Unit reference number: H39F 04

SCQF level: 8

SCQF Credit value: 15

Unit summary

This unit enables learners to develop their personal, professional and team working skills and to improve organisational effectiveness. They will also develop an understanding of IT professional ethics, practice and legislation.

Assessment methodology

This unit must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Develop own personal and professional skills	1.1 Identify own development needs and the activities needed to meet them			
	1.2 Obtain and review feedback from others on performance			
	1.3 Agree personal goals and plan development activities to meet them			
2 Work as a member of a team to achieve defined goals	2.1 Plan and manage own time to meet team objectives			
	2.2 Recognise and respect diversity, individual differences and perspectives			
	2.3 Accept and provide feedback in a constructive and considerate manner			
	2.4 Review the responsibilities, interests and concerns of colleagues to reduce obstacles to effective teamwork			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Understand what is meant by professional practice	3.1	Assess the implications for IT and Telecoms professionals of: • Data Protection Act • Computer Misuse Act • Communications Act • Telecommunications (Lawful Business Practice) (Interception of Communications) Regulations			
		3.2	Identify the role of professional bodies for IT and Telecoms, and the benefits of membership to individuals and organisations			
		3.3	Describe quality management systems and standards for systems development			
4	Understand the ethical and legislative environment relating to IT activities	4.1	Describe the impact on the IT and Telecoms activities of your organisation of legislation covering: • Processing of financial transactions • Health and safety • Privacy, confidentiality and security • Copyright and intellectual property rights			
		4.2	Describe the types of conflicts of interest which can arise for IT and Telecoms professionals			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Improve organisational effectiveness	5.1 Describe the aims and objectives of the organisation			
	5.2 Describe the organisation's brand or image and how it can be promoted			
	5.3 Identify the organisation's structure, roles and responsibilities			
	5.4 Identify and justify potential improvements to organisational effectiveness			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 4: Health and Safety in IT and Telecoms

Unit code: HS

Unit reference number: UC29 04

SCQF level: 4

SCQF Credit value: 1

Unit summary

This unit is designed to ensure that learners are aware of, and that they follow, the health and safety procedures in place in their workplace and which are applicable to their job role. Learners will explore the various sources of information on health and safety available to them.

Assessment methodology

This unit must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Comply with relevant health and safety procedures	1.1 Identify relevant organisational health and safety procedures			
	1.2 Identify available sources of health and safety information			
	1.3 Demonstrate how relevant health and safety procedures have been followed			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 5:   Interpersonal and Written Communication 1

Unit code: IWC1

Unit reference number: H39H 04

SCQF level: 5

SCQF Credit value: 6

Unit summary

This unit enables learners to communicate using language and terminology that is appropriate to the audience.

Typically this will involve:

- establishment of rapport with individuals through active listening

- composition of written material (for example documentation, emails, faxes, letters or presentations)

- successful interaction with individuals and groups.

This involves both receiving (for example lip-reading, listening and reading) and sending or giving (for example signing, speaking, presenting and writing) information.

Assessment methodology

Learning outcomes 2 and 4 must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Know interpersonal communication techniques	1.1 Identify verbal and non-verbal communication techniques			
	1.2 Describe attentive listening techniques			
	1.3 Identify positive and negative language			
	1.4 Describe the impact of listening barriers when communicating			
	1.5 Identify question types			
2 Be able to communicate interpersonally	2.1 Listen actively			
	2.2 Clarify and confirm audience understanding			
	2.3 Respond to questions with accurate information			
	2.4 Identify and reduce listening barriers			
	2.5 Maintain focus on the purpose of the communication			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Know basic techniques for communicating in writing	3.1	Identify how different formats and media can be used to meet audience needs			
		3.2	Identify when to use business and technical terminology			
		3.3	Describe how writing can be structured to help convey key information			
4	Be able to communicate and identify familiar information in writing	4.1	Identify the key information to be conveyed and the intended audience			
		4.2	Use media, format and structures which are suitable for the intended audience			
		4.3	Review own written work to ensure clarity and minimise spelling and grammatical errors			
		4.4	Identify key information in the written work of others			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 6: Interpersonal and Written Communication 2

Unit code: IWC2

Unit reference number: UC30 04

SCQF level: 6

SCQF Credit value: 9

Unit summary

This unit enables learners to communicate using language and terminology that is appropriate to the audience.

Typically this will involve:

- establishment of rapport with individuals through active listening
- composition of written material (for example documentation, emails, faxes, letters or presentations)
- successful interaction with individuals and groups.

This involves both receiving (for example lip-reading, listening and reading) and sending or giving (for example signing, speaking, presenting and writing) information.

Assessment methodology

Learning outcomes 2 and 4 must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand interpersonal communication techniques	1.1 Explain verbal and non-verbal communication techniques			
	1.2 Describe attentive listening techniques			
	1.3 Describe positive and negative language			
	1.4 Describe the impact of listening barriers when communicating			
	1.5 Describe different question types and how they can be used			
	1.6 Describe the impact of cultural differences on interpersonal communications			
2 Be able to communicate interpersonally	2.1 Select communication style and terminology to meet the needs of the audience			
	2.2 Listen actively			
	2.3 Clarify and confirm audience understanding			
	2.4 Respond to questions with accurate information that meet the needs of the audience			
	2.5 Identify and avoid listening barriers			
	2.6 Maintain focus on the purpose of the communication			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Understand techniques for communicating in writing	3.1 Describe how different formats and media can be used to meet audience needs			
	3.2 Explain when business and technical terminology should be used			
	3.3 Explain the ways in which writing can be structured to convey key information			
4 Be able to communicate and extract complex information in writing	4.1 Identify the key information to be conveyed and the intended audience			
	4.2 Use media, format and structures which meet the needs of the intended audience			
	4.3 Review own written work to ensure clarity and minimise spelling and grammatical errors			
	4.4 Review and edit the written work of others			
	4.5 Extract key information from the written work of others			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 7:   Interpersonal and Written Communication 3

Unit code: **IWC3**

Unit reference number: **H39K 04**

SCQF level: **8**

SCQF Credit value: **12**

Unit summary

This unit enables learners to communicate using language and terminology that is appropriate to the audience.

Typically this will involve:

- establishment of rapport with individuals through active listening

- composition of written material (for example documentation, emails, faxes, letters or presentations)

- successful interaction with individuals and groups.

This involves both receiving (for example lip-reading, listening and reading) and sending or giving (for example signing, speaking, presenting and writing) information.

Assessment methodology

Learning outcomes 2 and 4 must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand and evaluate interpersonal communication techniques	1.1 Explain and contrast verbal and non-verbal communication techniques			
	1.2 Explain attentive listening techniques			
	1.3 Analyse the impact of positive and negative language			
	1.4 Describe the impact of listening barriers when communicating and how they can be avoided			
	1.5 Evaluate different question types and how they can be most effectively used			
	1.6 Analyse the impact of cultural differences on interpersonal communications			
	1.7 Differentiate between facts and feelings			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Be able to communicate interpersonally	2.1 Select and adapt communication style and terminology to meet the needs of the audience			
	2.2 Listen actively			
	2.3 Clarify and confirm audience understanding			
	2.4 Respond to questions with accurate information that meet the needs of the audience			
	2.5 Identify and avoid listening barriers			
	2.6 Maintain focus on the purpose of the communication			
	2.7 Provide advice and guidance to colleagues on communicating information			
3 Understand techniques for communicating in writing	3.1 Evaluate how different formats and media can best be used to meet the needs of different audiences			
	3.2 Explain when business and technical terminology should be used			
	3.3 Evaluate the ways in which writing can be structured to convey key information			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Be able to communicate and interpret complex information in writing	4.1 Identify the key information to be conveyed and the intended audience			
	4.2 Use and adapt media, format and structures which meet the needs of the intended audience			
	4.3 Develop messages that convey and support alternative viewpoints			
	4.4 Review own written work to ensure clarity and minimise spelling and grammatical errors			
	4.5 Review and edit the written work of others and provide feedback to them			
	4.6 Interpret the written work of others to extract key information and supporting arguments			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 8: Customer Care for IT and Telecoms Professionals 1

Unit code: CC1

Unit reference number: H39L 04

SCQF level: 5

SCQF credit value: 7

Unit summary

This unit gives learners the skills to provide appropriate customer care when working as an IT or telecoms professional. Learners will initially explore the importance of customer care for IT and telecoms professionals. They will then have the opportunity to develop customer relationships, and look at how customer satisfaction can be measured.

Assessment methodology

Learning outcomes 2 and 3 must be assessed in the workplace.

Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria		Evidence type	Portfolio reference	Date
1. Know the importance of customer care for IT and Telecoms professionals	1.1	Identify the types of internal and external customers with whom IT and Telecoms professionals interact			
	1.2	List the type of products and services that IT and Telecoms professionals provide to internal and external customers			
	1.3	Describe what customer care involves for an IT and Telecoms professional			
2 Develop customer relationships	2.1	Identify organisational requirements and procedures for customer care			
	2.2	Communicate effectively with customers verbally, in writing and electronically			
	2.3	Develop relationships over time with regular customers			
	2.4	Assist customers to identify products and services that would suit their needs			
	2.5	Maintain specified documentation and records of customer interaction for review and service improvement			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Contribute to improving the delivery of service	3.1 Identify what the implications of customer satisfaction are for: • customer retention • working relationships 3.2 Identify methods for measuring customer satisfaction levels 3.3 Record specified customer satisfaction information			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 9: Customer Care for IT and Telecoms Professionals 2

Unit code: CC2

Unit reference number: UC31 04

SCQF level: 6

SCQF credit value: 10

Unit summary

This unit gives learners the skills to provide appropriate customer care when working as an IT or telecoms professional. Learners will initially evaluate the importance of customer care for IT and telecoms professionals. They will then have the opportunity to develop professional customer relationships, and look at how customer satisfaction can be measured and analysed in order to improve service delivery.

Assessment methodology

Learning outcomes 2 and 3 must be assessed in the workplace.

Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand the importance of customer care for IT and Telecoms professionals	1.1 Describe the types of internal and external customers with whom IT and Telecoms professionals interact			
	1.2 Describe the type of products and services that IT and Telecoms professionals provide to internal and external customers			
	1.3 Explain what customer care involves for an IT and Telecoms professional			
	1.4 Explain how different communication options can be used to meet the needs of customers			
	1.5 Describe a range of written and verbal communication techniques			
2 Develop professional customer relationships	2.1 Describe organisational requirements and procedures for customer care			
	2.2 Communicate effectively with customers verbally, in writing and electronically			
	2.3 Develop professional relationships over time with regular customers			
	2.4 Support customers to identify products and services that would suit their needs			
	2.5 Maintain documentation and records of customer interaction for review and service improvement			
	2.6 Ensure that documentation and records of customer interaction are maintained and can contribute to service improvement			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Contribute to improving the delivery of service	3.1 Explain what the implications of customer satisfaction are for: • customer retention • working relationships • costs • sales of products or services 3.2 Describe methods for measuring customer satisfaction levels 3.3 Gather specified customer satisfaction information 3.4 Report on customer satisfaction information			

Learner name: _____   Date:_____

Learner signature: _____   Date:_____

Assessor signature: _____   Date:_____

Internal verifier signature: _____   Date:_____
(*if sampled*)

Unit 10: Customer Care for IT and Telecoms Professionals 3

Unit code: CC3

Unit reference number: H39N 04

SCQF level: 8

SCQF credit value: 12

Unit summary

This unit gives learners the skills to provide appropriate customer care when working as an IT or telecoms professional. Learners will initially evaluate the importance of customer care for IT and telecoms professionals. They will then have the opportunity to develop professional customer relationships, and look at how customer satisfaction can be measured and analysed in order to improve service delivery.

Assessment methodology

This unit must be assessed in the workplace.

Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Evaluate the importance of customer care for IT and Telecoms professionals	1.1 Describe the types of internal and external customers with whom IT and Telecoms professionals interact			
	1.2 Compare and contrast the type of products and services that IT and Telecoms professionals provide to customers			
	1.3 Explain what customer care involves for an IT and Telecoms professional			
	1.4 Explain how different communication options can be used to meet the needs of customers			
	1.5 Describe a range of written and verbal communication techniques			
2 Develop professional customer relationships	2.1 Explain organisational requirements and procedures for customer care			
	2.2 Communicate effectively with customers verbally, in writing and electronically			
	2.3 Develop and maintain professional relationships over time with customers			
	2.4 Advise customers on products and services that would suit their needs			
	2.5 Ensure that documentation and records of customer interaction are maintained and can contribute to service improvement			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Improve the delivery of service	3.1 Evaluate the implications of customer satisfaction on the organisation			
	3.1 Evaluate methods for measuring customer satisfaction levels			
	3.3 Analyse and report on customer satisfaction information with recommendations for improving satisfaction levels			

Learner name: _____   Date:_____

Learner signature: _____   Date:_____

Assessor signature: _____   Date:_____

Internal verifier signature: _____   Date:_____
(*if sampled*)

Unit 11: IT and Telecom System Operations 1

Unit code: OPS1

Unit reference number: UC32 04

SCQF level: 5

SCQF credit value: 9

Unit summary

This unit enables learners to operate IT and telecoms systems. Learners will initially develop a knowledge of the technical architecture of either IT or telecoms systems and how to specify system operation parameters, and will then have the opportunity to assist with the operation and maintenance of systems.

This may include:

- using data backup and restore routines

- handling of incidents

- controlling and monitoring availability and performance of system components

- start-up/close-down routines

- scheduling routine or preventative maintenance

- maintenance of operating plans and schedules.

Examples of 'operational activities' are:

- replenishment of consumables

- routine or preventative maintenance

- data backups.

Assessment methodology

This unit must be assessed in the workplace.

Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Know the technical architecture of an IT or telecom system	1.1 Outline the technical architecture of the system			
	1.2 List the main physical and logical components of the system			
	1.3 Identify how system components are physically and logically interconnected			
	1.4 Identify the external connections of the system			
	1.5 List the facilities available for monitoring the operation of the system			
2 Know the expected functionality and capacity of the system	2.1 State the qualitative and quantitative measures of system operation			
	2.2 Identify how the system can be controlled to optimise performance			
	2.3 Identify how monitoring can be used to measure the qualitative and quantitative operation of the system			
	2.4 List any routine maintenance or replenishment required to maintain normal system operation			
3 Assist with the operation of the system	3.1 Use specified control facilities correctly to optimise system performance			
	3.2 Use specified monitoring facilities effectively to identify deviations from normal system operation			
	3.3 Promptly report deviations for further investigation			
	3.4 Correctly record specified system performance information			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Assist with system maintenance	4.1 Perform specified maintenance activities safely following applicable procedures and regulations			
	4.2 Accurately keep records of specified maintenance and replenishment activities			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 12: IT and Telecom System Operations 2

Unit code:	**OPS2**
Unit reference number:	**UC33 04**
SCQF level:	**6**
SCQF credit value:	**12**

Unit summary

This unit enables learners to operate IT and telecoms systems. Learners will initially develop knowledge of the technical architecture of either IT or telecoms systems and how to specify system operation parameters, and will then have the opportunity to operate the system and carry out system and maintenance.

This may include:

- using data backup and restore routines
- handling of incidents
- controlling and monitoring availability and performance of system components
- start-up/close-down routines
- scheduling routine or preventative maintenance
- maintenance of operating plans and schedules.

Examples of 'operational activities' are:

- replenishment of consumables
- routine or preventative maintenance
- data backups.

Assessment methodology

This unit must be assessed in the workplace.

Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand the technical architecture of an IT or telecom system	1.1 Describe the technical architecture of the system			
	1.2 Describe the main physical and logical components of the system and their contribution to overall system functionality			
	1.3 Describe how system components are physically and logically interconnected			
	1.4 Describe the external connections of the system			
	1.5 Describe the facilities available for controlling and monitoring the operation of the system			
2 Understand the expected functionality and capacity of the system	2.1 Identify how the expected functionality and capacity of the system is specified			
	2.2 Interpret functionality and capacity specifications to derive qualitative and quantitative measures of system operation			
	2.3 Describe how control facilities can be used to optimise system performance			
	2.3 Describe how monitoring can be used to measure the qualitative and quantitative operation of the system			
	2.4 Identify any routine maintenance or replenishment required to maintain normal system operation			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Operate the system	3.1 Use available facilities to control system operation and optimise performance			
	3.2 Use monitoring facilities effectively to identify actual and potential deviations from normal system operation			
	3.3 Check the validity of reported deviations from normal system operation			
	3.4 Investigate identified and reported deviations to identify required corrective actions			
	3.5 Ensure that system performance information is correctly recorded			
4 Carry out system maintenance	4.1 Follow procedures to schedule maintenance or replenishment activities to minimise disruption to system operation			
	4.2 Ensure that system users are promptly informed of changes to system availability or performance during maintenance activities			
	4.3 Accurately keep records of maintenance and replenishment activities			

Learner name: _____   Date:_____

Learner signature: _____   Date:_____

Assessor signature: _____   Date:_____

Internal verifier signature: _____   Date:_____
(*if sampled*)

Unit 13: IT and Telecom System Operations 3

Unit code: OPS3

Unit reference number: UC34 04

SCQF level: 7

SCQF credit value: 14

Unit summary

This unit enables learners to operate IT and telecoms systems. Learners will initially develop understanding of the technical architecture of either IT or telecoms systems and how to specify system operation parameters, and will then have the opportunity to control the operation and maintenance of systems.

This may include:

- using data backup and restore routines
- handling of incidents
- controlling and monitoring availability and performance of system components
- start-up/close-down routines
- scheduling routine or preventative maintenance
- maintenance of operating plans and schedules.

Examples of 'operational activities' are:

- replenishment of consumables
- routine or preventative maintenance
- data backups.

Assessment methodology

This unit must be assessed in the workplace.

Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand the technical architecture of IT or telecom systems	1.1	Explain the technical architecture of a system and describe alternative approaches			
		1.2	Explain the contribution to overall system functionality of the main physical and logical components of the system			
		1.3	Explain how system components can be physically and logically interconnected			
		1.4	Describe the external connections of the system and how they are used			
		1.5	Explain the facilities available for controlling and monitoring the operation of the system			
2	Understand how to specify system operation parameters	2.1	Explain how the expected functionality and capacity of the system has been specified			
		2.2	Explain how qualitative and quantitative measures of system operation have been derived from functionality and capacity specifications			
		2.3	Explain how the system can be controlled to optimise performance			
		2.4	Explain how monitoring can be used to measure the qualitative and quantitative operation of the system			
		2.5	Describe the routine maintenance or replenishment required to maintain normal system operation			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Control the operation of the system	3.1 Select the control facilities to be used and document how they are to be used to optimise system operation			
	3.2 Select the monitoring facilities to be used and document how they are to be used to identify actual and potential deviations from normal system operation			
	3.3 Define and implement procedures to check the validity of reported deviations from normal system operation			
	3.4 Define and implement procedures to investigate identified and reported deviations to identify required corrective actions			
	3.5 Define the system performance information to be recorded			
4 Control system maintenance	4.1 Define and implement procedures to schedule maintenance and replenishment activities to minimise disruption to system operation			
	4.2 Define and implement procedures to ensure that maintenance activities are carried out safely and in accordance with relevant regulations			
	4.3 Define and implement procedures to ensure that system users are promptly informed of changes to system availability or performance during maintenance activities			
	4.4 Define the maintenance and replenishment information to be recorded			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 14: IT and Telecom System Management 1

Unit code: SM1

Unit reference number: UC35 04

SCQF level: 5

SCQF credit value: 7

Unit summary

This unit gives learners the knowledge needed to administer ICT systems to ensure that they deliver the required functionality and capacity with minimum risk. A system can be any combination of equipment, hardware and software.

This unit enables learners to administer IT and telecoms systems, including configuring systems to meet organisational objectives and customer needs.

Assessment methodology

This unit must be assessed in the workplace.

Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Know how to administer systems	1.1 State the functionality of a specified system			
	1.2 Identify the components of a specified system			
	1.3 Identify what system configuration and component asset information is to be recorded and stored			
	1.4 State how system configuration and component asset information is recorded and stored			
	1.5 Describe the purpose and use of system management tools			
	1.6 State the importance of following product specifications and meeting customer requirements when administering systems			
	1.7 Describe the importance of security when administering systems			
2 Be able to administer a system under direction	2.1 Make specified changes to the system configuration			
	2.2 Follow relevant procedures, including health and safety, when configuring systems			
	2.3 Confirm that changes made to system configuration are effective			
	2.4 Gather and record asset and configuration information for specified items			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how to minimise risks when administering systems	3.1 Describe how to minimise data loss and corruption when administering systems			
	3.2 State how to minimise the impact on system users when making changes to system configuration			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 15: IT and Telecom System Management 2

Unit code: SM2

Unit reference number: UC36 04

SCQF level: 6

SCQF credit value: 12

Unit summary

This unit gives learners the skills needed to manage ICT systems under direction. A system can be any combination of equipment, hardware and software.

System management could involve changing system configuration to meet short-term fluctuations in demand (for example high numbers of calls to specific telephone numbers).

It could also involve longer-term changes such as increasing resources (for example processing or storage capacity) to meet anticipated needs and taking account of advances in technology.

This unit enables learners to manage IT and telecoms systems, including configuring systems to meet organisational objectives and customer needs, and understanding how to minimise risk when managing systems.

Assessment methodology

This unit must be assessed in the workplace.

Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand how to manage a system	1.1 Explain the functionality of a specified system			
	1.2 Describe the components of a specified system and the asset information associated with them			
	1.3 Describe how system configuration and component asset information is recorded and stored			
	1.4 Identify system management tools and describe how they are used			
	1.5 Describe the importance of following product specifications and meeting customer requirements when managing systems			
	1.6 Explain the importance of security when managing systems			
	1.7 Describe how available options for system management affect performance and capacity			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Manage a system under direction	2.1 Plan the implementation of system changes following organisational procedures			
	2.2 Implement configuration options to improve system performance and capacity			
	2.3 Implement changes to system configuration following organisational procedures			
	2.4 Confirm that changes made to system configurations are effective			
	2.5 Recognise and resolve or escalate any system problems arising from configuration changes			
	2.6 Record all relevant asset and configuration information			
3 Understand how to minimise risks when managing a system	3.1 Explain how to minimise data loss and corruption when managing systems			
	3.2 Describe how to minimise the impact on system users when making changes to system configuration			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 16: IT and Telecom System Management 3

Unit code: SM3

Unit reference number: UC37 04

SCQF level: 8

SCQF credit value: 15

Unit summary

This unit gives learners the skills needed to manage ICT systems to ensure that they deliver the required functionality and capacity. A system can be any combination of equipment, hardware and software.

System management could involve changing system configuration to meet short-term fluctuations in demand (for example high numbers of calls to specific telephone numbers).

It could also involve longer-term changes such as increasing resources (for example processing or storage capacity) to meet anticipated needs and taking account of advances in technology.

This unit enables learners to manage IT and telecoms systems, including configuring systems to meet organisational objectives and customer needs, risk evaluation and contributing to the development of an organisation's system management strategy.

Assessment methodology

This unit must be assessed in the workplace.

Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand how to manage systems	1.1 Explain how to align system functionality with organisational objectives and customer needs			
	1.2 Explain the types of configuration and asset information associated with systems			
	1.3 Explain the types and applications of system management and monitoring tools			
2 Review the functionality and management of systems	2.1 Evaluate the functionality of systems against organisational objectives and customer needs to identify possible improvements			
	2.2 Evaluate current system configuration and asset information to identify possible enhancements to performance and capacity			
	2.3 Assess current system management and monitoring tools, and their use, suggesting possible improvements			
	2.4 Review, and where necessary update, working procedures for system management			
	2.5 Evaluate the impact of regulatory requirements on system management			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Manage systems	3.1 Select and implement configuration options to optimise system performance and capacity			
	3.2 Ensure that changes made to system configurations are effective			
	3.3 Recognise and resolve any system problems arising from configuration changes			
	3.4 Audit records of system configuration and asset information for completeness and accuracy			
	3.5 Evaluate potential risks, including security threats, to systems			
	3.6 Contribute to the development of the organisation's system management strategy			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 17: Managing Software Development 1

Unit code:	**MSD1**
Unit reference number:	**UC38 04**
SCQF level:	**7**
SCQF credit value:	**15**

Unit summary

This unit enables learners to contribute to the management of software development projects, developing an understanding of the software development process and organisational environment. Software development commences with an agreed requirements definition and covers the creation of software designs, creation of the actual software components and finally installation and testing of the software.

Assessment methodology

Learning outcomes 2 and 3 must be assessed in the workplace.

Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand the software development process	1.1 Describe common programming paradigms and their applicability			
	1.2 Describe the stages of the traditional software development lifecycle model			
	1.3 Identify the key features of alternative approaches to software development			
	1.4 Identify the common types of procedures and conventions associated with software development			
2 Understand the organisational software development environment	2.1 Describe organisational tools and procedures for software development projects			
	2.2 Explain organisational conventions for the form, content and structure of software designs			
	2.3 Explain organisational conventions for the naming and internal documentation of software components			
	2.4 Describe organisational requirements for the form and content of software maintenance documentation			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Contribute to the management of the technical aspects of software development projects	3.1 Provide guidance to others on organisational tools, procedures and conventions for software development			
	3.2 Review the software development work of others for compliance with organisational procedures			
	3.3 Review specified outputs of software development projects for compliance with organisational conventions			
	3.4 Provide feedback to others, where necessary, to improve compliance with organisational procedures and conventions for software development			
	3.5 Accurately document the results of reviews to contribute to the overall improvement of compliance with organisational procedures and conventions for software development			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 18: Managing Software Development 2

Unit code: MSD2

Unit reference number: UC39 04

SCQF level: 8

SCQF credit value: 20

Unit summary

This unit enables learners to manage the organisation's software development environment and software development projects. Software development commences with an agreed requirements definition and covers the creation of software designs, creation of the actual software components and, finally, installation and testing of the software.

Assessment methodology

Learning outcomes 2 and 3 must be assessed in the workplace.

Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand the software development process	1.1 Compare and contrast common programming paradigms and their applicability			
	1.2 Explain the stages of the traditional software development lifecycle model			
	1.3 Explain the advantages and disadvantages of alternative approaches to software development			
	1.4 Describe the proposes of procedures and conventions associated with software development			
2 Maintain and develop the organisation's software development environment	2.1 Evaluate current organisational tools and procedures for software development to identify possible improvements			
	2.2 Review organisational conventions for the outputs of software development projects against best practice and external standards			
	2.3 Ensure that agreed identified improvements to organisational tools, procedures and conventions for software development are implemented promptly and disseminated to all relevant persons			
	2.4 Contribute to the development of organisational strategy for software development			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Manage the technical aspects of software development projects	3.1 Ensure that training and guidance on organisational tools, procedures and conventions for software development are available to all relevant persons			
	3.2 Ensure that all software development projects are reviewed for compliance with organisational conventions			
	3.3 Ensure that all necessary feedback is provided to improve compliance with organisational procedures and conventions for software development			
	3.4 Evaluate the results of reviews of software development projects to identify improvements to the overall compliance with organisational procedures and conventions			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 19:   Event Driven Computer Programming 1

Unit code: **EDP1**

Unit reference number: **UC40 04**

SCQF level: **5**

SCQF credit value: **8**

Unit summary

This unit introduces learners to the fundamental concepts of event-driven computer languages and their use to implement, refine and test a computer program.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Implement software using event driven programming	1.1 Declare and initialise variable and data structure types and sizes to implement given requirements			
	1.2 Assign properties to screen components			
	1.3 Associate events, including parameter passing, to screen components			
	1.4 Implement event handling using control structures			
	1.5 Declare file structures			
	1.6 Use standard input/output commands to implement design requirements			
	1.7 Use operators and predefined functions			
	1.8 Use an Integrated Development Environment (IDE)			
2 Refine an event driven program to improve quality	2.1 Follow an agreed standard for naming, comments and code layout			
	2.2 Implement data validation for inputs			
	2.3 Implement error handling and reporting			
	2.4 Create documentation to assist the users of a computer program			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Test the operation of an event driven program	3.1 Use the debugging facilities available in the IDE			
	3.2 Determine expected test results from given test data			
	3.3 Compare actual test results against expected results to identify discrepancies			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 20: Event Driven Computer Programming 2

Unit code: EDP2

Unit reference number: UC41 04

SCQF level: 6

SCQF credit value: 12

Unit summary

This unit gives learners the skills needed to implement a software design in an event driven programming language. It covers more advanced concepts of event driven computer languages and includes their use to refine and test computer programs.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Implement a software design using event driven programming	1.1 Identify the screen components and data and file structures required to implement a given design			
	1.2 Select, declare and initialise variable and data structure types and sizes to implement design requirements			
	1.3 Select and assign properties to screen components to implement design requirements			
	1.4 Select and associate events (including parameter passing) to screen components to implement design requirements			
	1.5 Implement event handling using control structures to meet the design algorithms			
	1.6 Select and declare file structures to meet design file storage requirements			
	1.7 Select and use standard input/output commands to implement design requirements			
	1.8 Make effective use of operators and predefined functions			
	1.9 Make effective use of an Integrated Development Environment (IDE) including code and screen templates			
2 Refine an event driven program to improve quality	2.1 Use an agreed standard for naming, comments and code layout			
	2.2 Define user functions to replace repeating code sequences			
	2.3 Implement data validation for inputs			
	2.4 Identify and implement opportunities for error handling and reporting			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Test the operation of an event driven program	3.1 Make effective use of the debugging facilities available in the IDE			
	3.2 Prepare a test strategy			
	3.3 Select suitable test data and determine expected test results			
	3.4 Record actual test results to enable comparison with expected results			
	3.5 Analyse actual test results against expected results to identify discrepancies			
	3.6 Investigate test discrepancies to identify and rectify their causes			
4 Document an event driven program	4.1 Create on-screen help to assist the users of a computer program			
	4.2 Create documentation for the support and maintenance of a computer program			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 21: Event Driven Computer Programming 3

Unit code: EDP3

Unit reference number: UC42 04

SCQF level: 8

SCQF credit value: 20

Unit summary

This unit gives learners the skills and competencies to carry out the development of an event driven computer program from design to testing in a professional capacity, and to understand a range of issues concerned with software development activities.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Design event driven programs to address loosely-defined problems	1.1 Identify and structure the components and data required to address problems			
	1.2 Select and use pre-defined components, specialising as required			
	1.3 Identify the set of events that invoke the behaviour of components and other programme elements			
	1.4 Specify the behaviour of components and other program elements to allow efficient implementation, selecting appropriate data types, data and file structures and algorithms			
	1.5 Record the design in an agreed format			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Implement a software design using event driven programming	2.1	Use an agreed standard for naming, comments and code layout			
		2.2	Define the screen components required to implement the design by assigning properties and event association (including parameter passing)			
		2.3	Select, declare and initialise variable and data structure types and sizes to meet design requirements			
		2.4	Adapt control structures to implement event (including error) handling to meet the design algorithms			
		2.5	Develop file structures to meet design file storage requirements			
		2.6	Develop input/output routines to implement design requirements			
		2.7	Make effective use of operators and predefined functions			
		2.8	Make effective use of an Integrated Development Environment (IDE) including code and screen templates			
3	Develop event driven programs to improve usability	3.1	Seek feedback on the usability of the program			
		3.2	Analyse feedback to identify improvements in usability			
		3.3	Design and implement data validation and error handling techniques which improve the usability of the program			
		3.4	Create on-screen help to assist program users			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Develop test strategies and apply these to event driven programs	4.1 Develop and apply a test strategy consistent with the design identifying appropriate test data			
	4.2 Apply regression testing consistent with the test strategy			
	4.3 Analyse actual test results to identify discrepancies			
	4.4 Use appropriate tools to estimate the performance of the program			
	4.5 Critically review the program functionality and usability against design requirements			
5 Document an event driven computer program	5.1 Create documentation to assist the users of a computer program			
	5.2 Create documentation for the support and maintenance of a computer program			
	5.3 Review program documentation against user and support needs			

Learner name: _____   Date:_____

Learner signature: _____   Date:_____

Assessor signature: _____   Date:_____

Internal verifier signature: _____   Date:_____
(*if sampled*)

Unit 22: Object Oriented Computer Programming 1

Unit code: OOP1

Unit reference number: UC43 04

SCQF level: 5

SCQF credit value: 8

Unit summary

This unit introduces learners to the fundamental concepts of object-oriented computer languages and their use to implement, refine and test a computer program.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Implement software using object oriented programming	1.1	Select, declare and initialise variable and data structure types and sizes to meet given requirements			
		1.2	Define relationships between objects			
		1.3	Implement object behaviours using control structures			
		1.4	Declare file structures			
		1.5	Use standard input/output commands			
		1.6	Use operators and predefined functions			
		1.7	Make effective use of an Integrated Development Environment (IDE)			
2	Refine an object oriented program to improve quality	2.1	Follow an agreed standard for naming, comments and code layout			
		2.2	Implement data validation for inputs			
		2.3	Implement error handling and reporting			
		2.4	Create on-screen help to assist the users of a computer program			
3	Test the operation of an object oriented driven program	3.1	Use the debugging facilities available in the IDE			
		3.2	Determine expected test results from given test data			
		3.3	Compare actual results against expected results to identify discrepancies			

Learner name: _____ Date:_____

Learner signature: _____ Date:_____

Assessor signature: _____ Date:_____

Internal verifier signature: _____ Date:_____
(*if sampled*)

Unit 23: Object Oriented Computer Programming 2

Unit code: OOP2

Unit reference number: UC44 04

SCQF level: 6

SCQF credit value: 12

Unit summary

This unit gives learners with the skills to implement a software design in an object-oriented programming language. It covers more advanced concepts of object-oriented computer languages and includes their use to refine and test computer programs.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Implement a software design using object oriented programming	1.1 Identify the objects and data and file structures required to implement a given design			
	1.2 Select, declare and initialise variable and data structure types and sizes to implement design requirements			
	1.3 Define relationships between objects to implement design requirements			
	1.4 Implement message passing between objects to implement design requirements			
	1.5 Implement object behaviours using control structures to meet the design algorithms			
	1.6 Select and declare file structures to meet design file storage requirements			
	1.7 Select and use standard input/output commands to implement design requirements			
	1.8 Make effective use of operators and predefined functions			
	1.9 Make effective use of an Integrated Development Environment (IDE) including code and screen templates			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Refine an object oriented program to improve quality	2.1 Use an agreed standard for naming, comments and code layout			
	2.2 Make effective use of encapsulation, polymorphism and inheritance			
	2.3 Implement data validation for inputs			
	2.4 Identify and implement opportunities for error handling and reporting			
3 Test the operation of an object oriented driven program	3.1 Make effective use of the debugging facilities available in the IDE			
	3.2 Prepare a test strategy to an agreed format			
	3.3 Select suitable test data and determine expected test results			
	3.4 Record actual test results to enable comparison with expected results			
	3.5 Analyse actual test results against expected results to identify discrepancies			
	3.6 Investigate test discrepancies to identify and rectify their causes			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Document an object oriented driven program	4.1 Create on-screen help to assist the users of a computer program			
	4.2 Create documentation for the support and maintenance of a computer program			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 24: Object Oriented Computer Programming 3

Unit code: **OOP3**

Unit reference number: **UC45 04**

SCQF level: **8**

SCQF credit value: **20**

Unit summary

This unit gives learners the skills and competencies needed to carry out the development of an object-oriented computer program from design to testing in a professional capacity, and to understand a range of issues concerned with software development activities.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Design object oriented programs to address loosely-defined problems	1.1 Identify a set of classes and their interrelationships to address the problem			
	1.2 Make effective use of encapsulation, inheritance and polymorphism			
	1.3 Select and reuse pre-existing objects and templates specialising as required			
	1.4 Structure the design so that objects communicate efficiently			
	1.5 Specify the properties and behaviour of classes to allow efficient implementation, selecting appropriate data types, data and file structures and algorithms			
	1.6 Record the design in an agreed format			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Implement a software design using object oriented programming	2.1 Use an agreed standard for naming, comments and code layout			
	2.2 Define the objects and file structures required to implement the design			
	2.3 Select, declare and initialise variable and data structure types and sizes to implement the design			
	2.4 Implement message passing between objects to meet the design			
	2.5 Implement object behaviours using control structures to meet the design algorithms			
	2.6 Develop input/output routines to implement design requirements			
	2.7 Make effective use of operators and predefined functions			
	2.8 Make effective use of encapsulation, polymorphism and inheritance			
	2.9 Make effective use of an Integrated Development Environment (IDE) including use and development of code and screen templates			
3 Develop object oriented programs to improve usability	3.1 Seek feedback on the usability of the program			
	3.2 Analyse feedback to identify improvements in usability			
	3.3 Design and implement data validation and error handling techniques which improve the usability of the program			
	3.4 Create on-screen help to assist program users			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Develop test strategies and apply these to object oriented programs	4.1 Develop and apply a test strategy consistent with the design identifying appropriate test data			
	4.2 Apply regression testing consistent with the test strategy			
	4.3 Analyse actual test results to identify discrepancies			
	4.4 Use appropriate tools to estimate the performance of the program			
	4.5 Critically review the program functionality and usability against design requirements			
5 Document an object oriented computer program	5.1 Create documentation to assist the users of a computer program			
	5.2 Create documentation for the support and maintenance of a computer program			
	5.3 Review program documentation against user and support needs			

Learner name: _____   Date:_____

Learner signature: _____   Date:_____

Assessor signature: _____   Date:_____

Internal verifier signature: _____   Date:_____
(*if sampled*)

Unit 25: Procedural Programming 1

Unit code: PP1

Unit reference number: UC46 04

SCQF level: 5

SCQF credit value: 8

Unit summary

This unit introduces learners to the fundamental concepts of procedural computer languages and their use to implement, refine and test a computer program.

Assessment methodology

This unit should be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Implement software using procedural programming	1.1	Select, declare and initialise variable and data structure types and sizes to meet given requirements			
		1.2	Implement control structures			
		1.3	Declare file structures			
		1.4	Use standard input/output commands			
		1.5	Use operators and predefined functions			
		1.6	Correctly use parameter passing mechanisms			
2	Refine a procedural program to improve quality	2.1	Follow an agreed standard for naming, comments and code layout			
		2.2	Implement data validation for inputs			
		2.3	Implement error handling and reporting			
		2.4	Create documentation to assist the users of a computer program			
3	Test the operation of a procedural program	3.1	Use available debugging tools			
		3.2	Determine expected test results from given test data			
		3.3	Compare actual test results against expected results to identify discrepancies			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 26: Procedural Programming 2

Unit code: PP2

Unit reference number: UC47 04

SCQF level: 6

SCQF credit value: 12

Unit summary

This unit gives learners the skills needed to implement a software design in a procedural programming language. It covers more advanced concepts of procedural computer languages and includes their use to refine and test computer programs.

Assessment methodology

This unit should be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Implement a software design using procedural programming	1.1	Identify the program modules, data and file structures required to implement a given design			
		1.2	Select, declare and initialise variable and data structure types and sizes to implement design requirements			
		1.3	Select and implement control structures to meet the design algorithms			
		1.4	Select and declare file structures to meet design file storage requirements			
		1.5	Select and use standard input/output commands to implement design requirements			
		1.6	Make effective use of operators and predefined functions			
		1.7	Correctly use parameter passing mechanisms			
2	Refine a procedural program to improve quality	2.1	Use an agreed standard for naming, comments and code layout			
		2.2	Define user functions to replace repeating code sequences			
		2.3	Implement data validation for inputs			
		2.4	Identify and implement opportunities for error handling and reporting			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Test the operation of a procedural program	3.1 Make effective use of available debugging tools			
	3.2 Prepare a test strategy to an agreed format			
	3.3 Select suitable test data and determine expected test results			
	3.4 Record actual test results to enable comparison with expected results			
	3.5 Analyse actual test results against expected results to identify discrepancies			
	3.6 Investigate test discrepancies to identify and rectify their causes			
4 Document a computer program	4.1 Create documentation to assist the users of a computer program			
	4.2 Create documentation for the support and maintenance of a computer program			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 27:   Procedural Programming 3

Unit code: **PP3**

Unit reference number: **UC48 04**

SCQF level: **8**

SCQF credit value: **20**

Unit summary

This unit gives learners the skills and competencies needed to carry out the development of a procedural computer program from design to testing in a professional capacity, and to understand a range of issues concerned with software development activities.

Assessment methodology

This unit should be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Design procedural programs to address loosely-defined problems	1.1 Identify and structure procedures and functions to address problems			
	1.2 Select and use library functions and procedures			
	1.3 Structure the design with regard to coupling and cohesion			
	1.4 Specify the behaviour of functions and procedures to allow efficient implementation, selecting appropriate data types, data and file structures and algorithms			
	1.5 Record the design in an agreed format			
2 Implement a software design using procedural programming	2.1 Use an agreed standard for naming, comments and code layout			
	2.2 Define the program modules, data and file structures required to implement the design			
	2.3 Select, declare and initialise variable and data structure types and sizes to meet design requirements			
	2.4 Adapt control structures to meet the design algorithms			
	2.5 Develop file structures to meet design file storage requirements			
	2.6 Develop input/output routines to implement design requirements			
	2.7 Develop functions to replace repeating code sequences			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Develop procedural programs to improve usability	3.1	Seek feedback on the usability of the program			
		3.2	Analyse feedback to identify improvements in usability			
		3.3	Design and implement data validation and error handling techniques which improve the usability of the program			
		3.4	Create on-screen help to assist program users			
4	Develop test strategies and apply these to procedural programs	4.1	Develop and apply a test strategy consistent with the design identifying appropriate test data			
		4.2	Apply regression testing consistent with the test strategy			
		4.3	Analyse actual test results to identify discrepancies			
		4.4	Use appropriate tools to estimate the performance of the program			
		4.5	Critically review the program functionality and usability against design requirements			
5	Document a procedural computer program	5.1	Create documentation to assist the users of a computer program			
		5.2	Create documentation for the support and maintenance of a computer program			
		5.3	Review program documentation against user and support needs			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 28: Investigating and Defining Customer Requirements for IT and Telecoms Systems 1

Unit code: IDR1

Unit reference number: UC49 04

SCQF level: 5

SCQF credit value: 9

Unit summary

This unit enables learners to develop the skills and knowledge needed to assist in the investigation and definition of customer requirements for IT and telecom systems and services.

Investigative methods, for example:

- observations

- examination of existing documents, records or software

- questionnaires

- site surveys.

Defects, for example inaccuracy, duplication and omission.

Needs, for example:

- data to be stored and processed

- functionality in terms of inputs, processes and outputs

- capacity, including numbers of users, throughput and data storage.

Assessment methodology

Learning outcome 2 must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Know how to investigate and define system requirements	1.1	State the types of needs and constraints which need to be identified to inform the design of an IT or Telecoms system			
		1.2	Identify common investigative methods and the types of information which they can be used to elicit			
		1.3	State the type of defects which can arise in information			
		1.4	State the importance of preserving the security and confidentiality of information			
2	Assist with the investigation and definition of system requirements	2.1	Correctly use specified investigative methods under direction			
		2.2	Accurately record gathered information using specified documentation			
		2.3	Review specified information to identify defects			
		2.4	Analyse specified information to identify current functionality and capacity needs			
		2.5	Accurately record the results of analyses using standard documentation			
		2.6	Follow organisational procedures to preserve the security and confidentiality of information			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 29: Investigating and Defining Customer Requirements for IT and Telecoms Systems 2

Unit code: IDR2

Unit reference number: UC50 04

SCQF level: 6

SCQF credit value: 12

Unit summary

This unit enables learners to develop the skills, knowledge and understanding to contribute to the investigation and definition of customer requirements for IT and telecom systems and services.

Investigative methods, for example:

- observations
- examination of existing documents, records or software
- questionnaires
- site surveys.

Defects, for example inaccuracy, duplication and omission.

Needs, for example:

- data to be stored and processed
- functionality in terms of inputs, processes and outputs
- capacity, including numbers of users, throughput and data storage.

Assessment methodology

Learning outcome 2 must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand how to investigate and define system requirements	1.1 Describe the types of needs and constraints which need to be identified to inform the design of an IT or telecoms system			
	1.2 Describe common investigative methods and state the types of information which they can be used to elicit			
	1.3 Describe the type of defects which can arise in information			
	1.4 Explain the importance of preserving the security and confidentiality of information			
2 Contribute to the investigation and definition of system requirements	2.1 Correctly use specified investigative methods to gather information on existing systems and processes			
	2.2 Accurately record gathered information using specified documentation			
	2.3 Review own gathered information to identify defects and where necessary take action to remedy identified defects			
	2.4 Analyse specified information to identify current and future functionality and capacity needs			
	2.5 Accurately record the results of analyses using standard documentation			
	2.6 Follow organisational procedures to preserve the security and confidentiality of information			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 30: Investigating and Defining Customer Requirements for IT and Telecoms Systems 3

Unit code: IDR3

Unit reference number: UC51 04

SCQF level: 8

SCQF credit value: 15

Unit summary

This unit covers the investigation of existing systems and processes and the analysis of information to identify needs and constraints.

This unit enables learners to develop the skills, knowledge and understanding to take a leading role in the investigation and definition of customer requirements for IT and telecoms systems and services.

Investigative methods, for example:

- observations
- examination of existing documents, records or software
- questionnaires
- site surveys.

Defects, for example inaccuracy, duplication and omission.

Needs, for example:

- data to be stored and processed
- functionality in terms of inputs, processes and outputs
- capacity, including numbers of users, throughput and data storage.

Assessment methodology

Learning outcome 2 must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand how to investigate and define system requirements	1.1 Explain how needs and constraints are used to inform the design of an IT or telecoms system			
	1.2 Evaluate the effectiveness of common investigative methods in eliciting different types of information			
	1.3 Explain how defects can arise in information and how they can be eliminated			
	1.4 Evaluate the impact of failures to preserve the security and confidentiality of information			
2 Control the investigation and definition of system requirements	2.1 Select investigative methods, for use by self and others, which will effectively elicit all relevant information on existing systems and processes			
	2.2 Ensure that all gathered information is accurately recorded using specified documentation			
	2.3 Ensure that all gathered information is reviewed to identify defects and all necessary actions have been taken to remedy identified defects			
	2.4 Ensure that all records of the results of analyses are recorded using standard documentation			
	2.5 Synthesise analysis results to define overall system requirements in an agreed format			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Investigate customer requirements	3.1 Correctly use a range of investigative methods to gather information on existing systems and processes			
	3.2 Analyse information to identify constraints and current and future functionality and capacity needs			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 31: Remote Support for IT and Telecoms Products or Services 1

Unit code: RS1

Unit reference number: UC52 04

SCQF level: 5

SCQF credit value: 6

Unit summary

This unit enables learners to develop the knowledge and skills to provide basic remote support for products and services in an IT context.

Assessment methodology

This unit must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Know the role of remote support in the organisation	1.1 State the products or services to be supported			
	1.2 List the standard features and common uses of the products or services			
	1.3 Identify the main benefits of the products or services			
	1.4 Identify frequently used product or service configuration options			
	1.5 Identify organisational requirements and procedures for remote support			
2 Provide remote support for specified products or services	2.1 Promptly confirm the customer's identity			
	2.2 Correctly validate the request for support			
	2.3 Accurately identify the customer's support needs			
	2.4 Provide sufficient relevant information to meet the customer's needs, confirming their understanding of the information provided			
	2.5 Where customer needs are not met, promptly escalate the request to the relevant persons			
	2.6 Accurately record specified customer support information using given formats			
	2.7 Follow organisational procedures when providing support to customers			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 32: Remote Support for IT and Telecoms Products or Services 2

Unit code: RS2

Unit reference number: UC53 04

SCQF level: 6

SCQF credit value: 9

Unit summary

This unit enables learners to develop the knowledge, understanding and skills to support ICT products and services.

Assessment methodology

This unit must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand the role of remote support in the organisation	1.1 Describe the advanced features of the products or services to be supported			
	1.2 Describe the main benefits and uses of the products or services			
	1.3 Describe how the product or service can be configured to meet customer needs			
	1.4 Identify sources of technical or specialist information and advice on the products or services			
	1.5 Explain organisational requirements and procedures for remote support			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Provide remote support for specified products or services	2.1 Promptly confirm the customer's identity			
	2.2 Correctly validate the request for support			
	2.3 Accurately identify the customer's support needs			
	2.4 Where the product or service is capable of meeting the customer's needs provide sufficient relevant information to enable this			
	2.5 Where customer needs are not met, promptly escalate the request for relevant action			
	2.6 Where the existing product or service is not intended to meet the customer's needs identify and suggest additional or alternative products or services			
	2.7 Confirm the customer's expectations of any further actions and their understanding of all information provided			
	2.8 Accurately record customer support information using given formats			
	2.9 Follow organisational procedures when providing support to customers			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 33: Remote Support for IT and Telecoms Products or Services 3

Unit code: RS3

Unit reference number: UC54 04

SCQF level: 8

SCQF credit value: 12

Unit summary

This unit enables learners to develop the knowledge, understanding and skills to maintain and implement customer remote support requirements in an IT context.

Assessment methodology

This unit must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria		Evidence type	Portfolio reference	Date
1 Understand the role of remote support in the organisation	1.1	Explain the types of products and services to be supported			
	1.2	Evaluate the service level requirements of the agreements under which support is provided			
	1.3	Evaluate the effectiveness of different methods and media for providing remote support			
2 Maintain and develop the organisation's remote support provision	2.1	Evaluate current organisational tools and procedures for remote support to identify possible improvements			
	2.2	Review organisational provision of remote support against best practice and external standards			
	2.3	Ensure that agreed identified improvements to organisational tools and procedures for providing remote support are implemented promptly and disseminated to all relevant persons			
	2.4	Contribute to the development of organisational strategy for providing remote support			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Manage the provision of remote support	3.1 Ensure that training and guidance on organisational tools and procedures for providing remote support are available to all relevant persons			
	3.2 Ensure that individuals' provision of remote support is reviewed for compliance with organisational procedures			
	3.3 Ensure that all necessary feedback is provided to individuals to improve compliance with organisational procedures			
	3.4 Analyse the records of support provision over time to identify trends and recurring requests			
	3.5 Implement an action plan to respond to trends and recurring requests			

Learner name: _____ Date:_____

Learner signature: _____ Date:_____

Assessor signature: _____ Date:_____

Internal verifier signature: _____ Date:_____
(*if sampled*)

Unit 34: IT and Telecoms Fault Diagnosis 1

Unit code:	**TFD1**
Unit reference number:	**UC55 04**
SCQF level:	**5**
SCQF credit value:	**6**

Unit summary

This unit enables learners to develop a knowledge of the processes, methods and information that are used in the diagnosis of faults. Learners apply their knowledge in the practical diagnosis and remedy of a range of faults.

Assessment methodology

Learning outcomes 2 and 3 must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Know the technical fault diagnosis process	1.1 State the role of fault validation, information gathering, information analysis and solution identification in the fault diagnosis process			
	1.2 List the types of information that are commonly needed to support the fault diagnosis process			
	1.3 Describe common diagnostic methods			
	1.4 State the importance of minimising disruption to service during diagnostics			
2 Understand the organisational fault diagnosis environment	2.1 Identify organisational tools and procedures for fault diagnosis			
	2.2 List sources of relevant specialist technical information and advice			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Diagnose faults in familiar IT or Telecoms equipment	3.1 Use existing diagnostic information to identify fault indications and possible causes			
	3.2 Correctly use specified diagnostic tools to generate additional diagnostic information			
	3.3 Use available diagnostic and technical information to identify the probable cause of faults			
	3.4 Select, from given alternatives, a suitable remedy to rectify identified faults			
	3.4 Accurately record fault diagnosis activities using standard documentation			
	3.5 Follow organisational procedures during fault diagnosis activities			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 35: IT and Telecoms Fault Diagnosis 2

Unit code: TFD2

Unit reference number: UC56 04

SCQF level: 7

SCQF credit value: 8

Unit summary

This unit enables learners to develop an understanding of the processes, methods and information that are used in the diagnosis of faults. Learners apply their knowledge and understanding in the practical diagnosis and remedy of a range of faults.

Assessment methodology

This unit must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand the technical fault diagnosis process	1.1	Describe the role of fault validation, information gathering, information analysis and solution identification in the fault diagnosis process			
		1.2	Describe the types of information that are commonly needed to support the fault diagnosis process			
		1.3	Explain common diagnostic methods and give examples of their appropriate use			
		1.4	Explain the importance of minimising disruption to service during diagnostics			
2	Understand the organisational fault diagnosis environment	2.1	Describe organisational tools and procedures for fault diagnosis			
		2.2	Identify sources of relevant specialist technical information and advice			
3	Diagnose faults in a range of IT or Telecoms equipment	3.1	Interpret existing diagnostic information to identify fault indications and possible causes			
		3.2	Select and correctly use appropriate diagnostic tools to generate additional diagnostic information			
		3.3	Analyse all available diagnostic and technical information to identify the probable cause of faults			
		3.4	Accurately record fault diagnosis activities using standard documentation			
		3.5	Follow organisational procedures for fault diagnosis			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select remedies for faults in a range of IT or telecoms equipment	4.1 Describe the factors which need to be taken into account when selecting remedies for faults 4.2 Evaluate potential remedies to identify the most effective one			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 36: IT and Telecoms Fault Diagnosis 3

Unit code: **TFD3**

Unit reference number: **UC57 04**

SCQF level: **8**

SCQF credit value: **12**

Unit summary

This unit enables learners to apply processes and techniques designed to manage the diagnosis and remedy of faults within a technical context. Learners will also contribute to the development of an organisational strategy for fault diagnosis and remedy.

Assessment methodology

This unit must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand the technical fault diagnosis process	1.1 Explain the role of fault validation, information gathering, information analysis and solution identification in the fault diagnosis process			
	1.2 Explain how information is used to support the fault diagnosis process			
	1.3 Evaluate a range of diagnostic methods			
	1.4 Explain the importance of minimising disruption to service while diagnosing and remedying faults			
2 Maintain and develop the organisational fault diagnosis environment	2.1 Evaluate current organisational tools and procedures for fault diagnosis and remedy to identify possible improvements			
	2.2 Ensure that agreed identified improvements to organisational tools and procedures for fault diagnosis and remedy are implemented promptly and disseminated to all relevant persons			
	2.3 Review and update sources of relevant specialist technical information and advice			
	2.4 Contribute to the development of organisational strategy for fault diagnosis and remedy			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Manage the technical aspects of fault diagnosis and remedy	3.1 Ensure that training and guidance on organisational tools and procedures for fault diagnosis and remedy are available to all relevant persons			
	3.2 Ensure that individuals' fault diagnosis and remedy activities are reviewed for compliance with organisational procedures			
	3.3 Ensure that all necessary feedback is provided to individuals to improve compliance with organisational procedures			
	3.4 Analyse the records of fault diagnosis and remedy over time to identify trends and recurring faults			
	3.5 Implement an action plan to respond to trends and recurring faults			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 37: Testing IT and Telecoms Systems 1

Unit code: TEST1

Unit reference number: UC58 04

SCQF level: 5

SCQF credit value: 6

Unit summary

This unit enables learners to develop the knowledge and skills to carry out routine testing of IT and telecoms systems and to assist with the testing of system components.

Assessment methodology

Learning outcomes 2 and 3 must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Know the principles of IT and telecoms testing	1.1 Identify the purposes of testing and the applicability of common classes of test			
	1.2 State preparation and conclusion activities associated with testing			
	1.3 Identify organisational requirements and procedures for testing and available test equipment and software			
2 Prepare for the testing of system components	2.1 Correctly identify the specified components to be tested			
	2.2 Correctly prepare any test equipment or software to be used			
3 Assist with the testing of system components	3.1 Correctly implement specified preparations prior to carrying out tests			
	3.2 Correctly apply planned inputs making effective use of test equipment or software			
	3.3 Accurately record outputs from system and test equipment or software			
	3.4 Accurately record, and where necessary promptly respond to, any errors arising during the test			
	3.5 Correctly implement specified activities following the completion of testing			
	3.6 Identify all discrepancies between actual and expected outputs			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 38: Testing IT and Telecoms Systems 2

Unit code: TEST2

Unit reference number: UC59 04

SCQF level: 6

SCQF credit value: 12

Unit summary

This unit enables learners to develop knowledge, understanding and skills to carry out testing of IT and telecoms systems.

Assessment methodology

Learning outcomes 2, 3 and 4 must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand the principles of IT and telecoms testing	1.1 Describe the purposes of testing and the applicability of common classes of test			
	1.2 Identify preparation and conclusion activities associated with testing and the circumstances in which they may be required			
	1.3 Describe organisational requirements and procedures for testing and available test equipment and software			
2 Plan for the testing of system components	2.1 Correctly identify the components to be tested and the purpose of the test			
	2.2 Select the types and sequences of test required to thoroughly test the components			
	2.3 Select any test equipment or software to be used			
	2.4 Define sufficient relevant inputs and expected outputs for the planned tests			
	2.5 Document required test preparation and conclusion activities			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Carry out the testing of system components	3.1 Implement all required preparations prior to carrying out tests			
	3.2 Correctly apply planned inputs making effective use of any test equipment or software			
	3.3 Accurately record system and test equipment or software outputs			
	3.4 Accurately record, and where necessary promptly respond to, any errors arising during the test			
	3.5 Implement all required activities following the completion of testing			
4 Interpret test results	4.1 Analyse test records to identify any discrepancies between actual and expected outputs and the source of any recorded errors			
	4.2 Investigate and document the possible causes of identified discrepancies and errors			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 39: Testing IT and Telecoms Systems 3

Unit code:	**TEST3**
Unit reference number:	**UC60 04**
SCQF level:	**8**
SCQF credit value:	**15**

Unit summary

This unit enables learners to develop knowledge, understanding and skills to carry out testing of IT and telecoms systems and provide expertise to others in testing.

Assessment methodology

Learning outcomes 2, 3 and 4 must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand the principles of IT and telecoms testing	1.1 Explain the purposes of testing			
	1.2 Explain the factors which determine the applicability of different classes of test			
	1.3 Explain the importance of preparation and conclusion activities associated with testing and the circumstances in which they may be required			
	1.4 Explain organisational requirements and procedures for testing			
	1.5 Describe the capabilities of available test equipment and software			
2 Plan for the testing of an IT or telecoms system	2.1 Analyse available information to accurately define the functionality to be tested and the purpose of the test			
	2.2 Select and document the types, sequences and number of tests required to thoroughly test the defined functionality			
	2.3 Select, and where necessary adapt, test equipment or software to be used			
	2.4 Accurately determine the types and amounts of inputs and expected outputs for the planned tests			
	2.5 Define all required test preparation and conclusion activities			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Control the testing of system components	3.1 Ensure that all required preparations are correctly implemented prior to carrying out tests			
	3.2 Instruct others in the effective use of test equipment or software			
	3.3 Ensure that all required activities have been correctly implemented following the completion of testing			
	3.4 Develop documentation for recording test results			
	3.5 Contribute to the development of organisational test strategy			
4 Evaluate test results	4.1 Ensure that individual tests are correctly recorded and indicate source of any errors			
	4.2 Ensure that test records are analysed to identify discrepancies between actual and expected outputs			
	4.3 Investigate and document the probable causes of identified discrepancies and errors			
	4.4 Examine multiple test records to identify trends or recurring discrepancies and errors			
	4.5 Implement an action plan to respond to discrepancies and errors			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 40: User Profile Administration

Unit code:	**UPA**
Unit reference number:	**UC61 04**
SCQF level:	**6**
SCQF credit value:	**3**

Unit summary

This unit enables learners to develop an understanding of how to design, create and administer user profiles in an IT or telecoms system.

Assessment methodology

Learning outcomes 2 and 3 must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand the role of user and group profiles in IT and telecoms systems	1.1 Explain the importance and purpose of user and group profiles			
	1.2 Describe the type and function of information held in typical user and group profiles			
	1.3 Describe the factors that need to be considered in the design of a user or group profile			
2 Understand organisational procedures for profile administration	2.1 Describe the hierarchy of profiles that reflect organisational structure and system user requirements			
	2.2 Describe organisational procedures for the administration and security of profiles			
3 Administer user and group profiles	3.1 Design and implement profiles which accurately meet given requirements for system and resource access			
	3.2 Correctly update profiles to reflect changes in requirements			
	3.3 Provide guidance on the administration and security of profiles to others			

Learner name: _____   Date:_____

Learner signature: _____   Date:_____

Assessor signature: _____   Date:_____

Internal verifier signature: _____   Date:_____
(*if sampled*)

Unit 41: IT and Telecom System Security 1

Unit code: SEC1

Unit reference number: UC62 04

SCQF level: 5

SCQF credit value: 4

Unit summary

This unit enables learners to develop knowledge of the main threats to the security of IT systems and data and how to protect against them. Learners will consider the security measures in place in an organisation and contribute to the maintenance of system security.

Assessment methodology

Learning outcomes 3 and 4 must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Know threats to IT and telecoms systems	1.1 List common types of physical threat to systems and data			
	1.2 List common types of electronic threats to systems and data			
	1.3 State the effects of common types of malicious code			
2 Know how to protect IT and telecoms systems	2.1 Identify methods of providing physical access control and security			
	2.2 Identify methods of providing electronic access control and security			
	2.3 Describe the importance of maintaining the currency of security tools			
	2.4 Describe the characteristics of strong passwords			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know organisational procedures for system security	3.1 State organisational procedures for system security			
	3.2 List available security tools and equipment			
	3.3 State organisational conventions for the construction of passwords			
	3.4 Describe the process for reporting any actual or attempted breaches of security			
4 Contribute to maintaining system security	4.1 Correctly configure security tools to meet specified requirements			
	4.2 Monitor the operation of specified security tools to identify actual and attempted security breaches			
	4.3 Accurately record all security actions and relevant information using standard documentation			
	4.4 Follow organisational procedures for system security			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 42: IT and Telecom System Security 2

Unit code: SEC2

Unit reference number: UC63 04

SCQF level: 6

SCQF credit value: 8

Unit summary

This unit enables learners to develop knowledge, understanding and skills to ensure the security of an IT system and its data. Learners will use security tools and contribute to the maintenance of system security.

Assessment methodology

Learning outcomes 3 and 4 must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand threats to IT and telecoms systems	1.1 Describe common types of physical threat to systems and data			
	1.2 Describe common types of electronic threats to systems and data			
	1.3 Describe the operation of common types of malicious code			
	1.4 Explain the security vulnerabilities associated with remote access technologies including wireless			
2 Understand how to protect IT and telecoms systems	2.1 Describe methods of providing physical access control and security			
	2.2 Describe methods of providing electronic access control and security			
	2.3 Explain the importance of maintaining the currency of security tools			
	2.4 Explain how encryption can contribute to data security			
	2.5 Explain how keys and certificates can be used to provide data security			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Understand organisational procedures for system security	3.1 Describe organisational procedures for system security and passwords			
	3.2 Describe the operation and application of available security tools and equipment			
	3.3 Describe the features of the organisational procedures for disaster recovery			
	3.4 Explain the potential operational impact of security breaches			
4 Contribute to maintaining system security	4.1 Correctly identify the security requirements of specified system assets and resources			
	4.2 Implement, configure and maintain security tools to meet identified requirements			
	4.3 Monitor the operation of security tools to identify actual and attempted security breaches			
	4.4 Provide guidance on security, the use of security tools and the construction of passwords to others			
	4.5 Contribute to reviews of system security			
	4.6 Accurately record all security actions and relevant information using standard documentation			
	4.7 Contribute to the development of organisational procedures for system security			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 43: IT and Telecom System Security 3

Unit code: SEC3

Unit reference number: UC64 04

SCQF level: 8

SCQF credit value: 12

Unit summary

This unit enables learners to develop the knowledge, understanding and skills needed to manage and maintain IT system security.

Assessment methodology

Learning outcomes 3 and 4 must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand threats to IT and telecoms systems	1.1 Evaluate physical threats to systems and data			
	1.2 Evaluate electronic threats to systems and data			
	1.3 Explain the operation of common types of malicious code			
	1.4 Evaluate the security vulnerabilities associated with remote access technologies including wireless			
2 Understand how to protect IT and telecoms systems	2.1 Evaluate methods of providing physical access control and security			
	2.2 Evaluate methods of providing electronic access control and security			
	2.3 Discuss the importance of maintaining the currency of security tools			
	2.4 Critically compare three Access Control Methods in common use			
	2.5 Explain cryptographic algorithms and their application to system security			
	2.6 Explain how keys and certificates can be used to provide data security			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Maintain and develop organisational system security	3.1 Evaluate current organisational tools and procedures for system security to identify possible improvements			
	3.2 Review organisational system security against best practice and external standards			
	3.3 Implement agreed improvements to organisational tools, procedures and conventions for systems security			
	3.4 Contribute to the development of organisational strategy for system security and disaster recovery			
	3.5 Develop training and guidance materials on organisational tools, procedures and conventions for system security			
4 Manage system security	4.1 Critically review system security for currency, completeness and compliance with organisational procedures			
	4.2 Implement, configure and maintain security tools			
	4.3 Analyse and interpret the results of security testing and monitoring activities			
	4.4 Take action to mitigate perceived security risks or vulnerabilities			
	4.5 Report on the consequences of any actual or attempted security breaches			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 44: Technical Advice and Guidance 1

Unit code: TAG1

Unit reference number: UC65 04

SCQF level: 5

SCQF credit value: 4

Unit summary

This unit covers basic knowledge of how to provide technical advice and guidance and practical application of this knowledge in providing reactive technical advice and guidance.

Assessment methodology

Learning outcome 2 must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Know how to provide technical advice and guidance	1.1 Identify how technical advice and guidance can be used			
	1.2 List the types of information which can form the basis of technical advice and guidance			
	1.3 Identify organisational procedures which can apply to the provision of technical advice and guidance			
	1.4 Identify circumstances where technical advice and guidance should be provided proactively rather than reactively			
2 Provide reactive technical advice and guidance to customers	2.1 Identify the purposes for which technical advice and guidance is required			
	2.2 Check organisational guidance to ensure that customers are entitled to receive the requested technical advice and guidance			
	2.3 Communicate effectively with customers to obtain specified information			
	2.4 Provide advice and guidance in line with information specified by the customer			
	2.5 Communicate technical advice and guidance to customers in line with organisational procedures, confirming customer understanding of the information provided			
	2.6 Follow organisational procedures for responding to customer requests including the timely escalation of those for which technical advice and guidance cannot be provided or does not resolve the request			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 45: Technical Advice and Guidance 2

Unit code:	**TAG2**
Unit reference number:	**UC66 04**
SCQF level:	**7**
SCQF credit value:	**7**

Unit summary

This unit gives learners an understanding of the context for providing technical advice and guidance. It also covers practical provision of both reactive and proactive advice and guidance.

Assessment methodology

Learning outcomes 2 and 3 must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Know the context for providing technical advice and guidance	1.1 Describe how technical advice and guidance can be used to resolve problems and improve performance			
	1.2 Describe the available types, sources and applicability of information which can form the basis of technical advice and guidance			
	1.3 Describe the commercial, regulatory and security factors which can apply to the provision of technical advice and guidance			
	1.4 Differentiate between proactive and reactive technical advice and guidance			
	1.5 Describe organisational procedures for providing technical advice and guidance			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Provide reactive technical advice and guidance to customers	2.1 Determine the purposes for which technical advice and guidance is required			
	2.2 Use organisational guidance to verify that customers are entitled to receive the requested technical advice and guidance			
	2.3 Communicate effectively with customers to elicit sufficient information to enable correct technical advice and guidance to be provided			
	2.4 Provide advice and guidance in line with information specified by the customer			
	2.5 Communicate technical advice and guidance to customers in line with organisational procedures confirming customer understanding of the information provided			
	2.6 Follow organisational procedures for responding to customer requests including the timely escalation of those for which technical advice and guidance cannot be provided or does not resolve the request			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Provide proactive technical advice and guidance to customers	3.1 Identify the purposes for which the technical advice and guidance is required			
	3.2 Identify the customers level of technical knowledge, following organisational guidelines			
	3.3 Develop technical advice and guidance in a format and style which takes into account the customers' level of technical knowledge			
	3.4 Use appropriate media to disseminate technical advice and guidance to identified customers			
	3.5 Follow organisational procedures for providing proactive technical advice and guidance			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 46: Technical Advice and Guidance 3

Unit code: **TAG3**

Unit reference number: **UC67 04**

SCQF level: **8**

SCQF credit value: **12**

Unit summary

This unit enables learners to develop the knowledge, understanding and skills to provide operational and strategic advice and guidance on a wide range of IT issues.

Assessment methodology

Learning outcomes 2, 3 and 4 must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand the context for providing technical advice and guidance	1.1 Explain how technical advice and guidance can be used to resolve problems and improve performance			
	1.2 Evaluate available types, sources and applicability of information as a basis for technical advice and guidance			
	1.3 Explain the commercial, regulatory and security factors which can apply to the provision of technical advice and guidance			
	1.4 Compare and contrast proactive and reactive technical advice and guidance			
	1.5 Explain organisational procedures for providing technical advice and guidance			
2 Provide reactive technical advice and guidance to customers	2.1 Evaluate the purposes for which technical advice and guidance is required			
	2.2 Verify that customers are entitled to receive the requested technical advice and guidance			
	2.3 Obtain sufficient information to enable correct technical advice and guidance to be provided			
	2.4 Provide relevant advice and guidance to customers based on all available information			
	2.5 Communicate technical advice and guidance to customers in line with organisational procedures confirming customer understanding of the information provided			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Provide proactive technical advice and guidance to customers	3.1 Evaluate the purposes for which the technical advice and guidance is required			
	3.2 Asses the range of levels of technical knowledge of relevant customer groups			
	3.3 Develop technical advice and guidance in formats which take into account the customers' level s of technical knowledge			
	3.4 Select and use appropriate media to disseminate technical advice and guidance to identified customers			
	3.5 Follow organisational procedures for providing proactive technical advice and guidance			
4 Control the provision of technical advice and guidance	4.1 Ensure that relevant information on the provision of technical advice and guidance is accurately recorded			
	4.2 Analyse records to identify trends and recurring requests			
	4.3 Implement an action plan to respond to trends and recurring requests			
	4.4 Develop training materials on the provision of technical advice and guidance			
	4.5 Contribute to the development of organisational strategy for providing technical advice and guidance			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 47: Working with IT and Telecoms Hardware and Equipment 1

Unit code: WHE1

Unit reference number: UC68 04

SCQF level: 5

SCQF credit value: 7

Unit summary

This unit gives learners the skills and understanding needed for dealing with IT and telecoms hardware and equipment. This can include cables, PC boards, racks, rack-mounted equipment, poles, masts, aerials and large computer systems. Work can be carried out on, for example, single or networked systems or a telephone exchange.

Assessment methodology

Learning outcome 2 must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Know how to work with IT and telecoms hardware and equipment	1.1 State the importance of planning IT and telecoms work activities			
	1.2 Identify available tools and their applicability to specific work activities			
	1.3 Describe organisational procedures for working with hardware and equipment and for recording information			
	1.4 Describe the importance of product specifications when carrying out work activities			
	1.5 Describe the regulatory requirements which affect planned work activities			
2 Carry out work activities on IT and telecoms hardware and equipment	2.1 Interpret given work plans to identify relevant activities, hardware and equipment			
	2.2 Check that any necessary work permissions have been obtained before commencing work activities			
	2.3 Use and handle specified tools and equipment safely and in accordance with relevant guidelines and instructions when carrying out work activities			
	2.4 Set specified configurations in line with work plans			
	2.5 Accurately record information on work activities using organisational documentation			
	2.6 Communicate progress and the outcomes of work, using organisational documentation, to specified people			
	2.7 Follow organisational procedures and relevant legislation or regulations when carrying out work activities			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 48: Working with IT and Telecoms Hardware and Equipment 2

Unit code: WHE2

Unit reference number: UC69 04

SCQF level: 6

SCQF credit value: 10

Unit summary

This unit gives learners the skills and understanding needed to deal with IT and telecoms hardware and equipment. This can include cables, PC boards, racks, rack mounted equipment, poles, masts, aerials and large computer systems. Work can be carried out on, for example, single or networked systems or a telephone exchange.

Assessment methodology

Learning outcomes 2 and 3 must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand how to work with IT and telecoms hardware and equipment	1.1 Describe the importance of planning IT and telecoms work activities			
	1.2 Describe available tools and techniques and their applicability to specific work activities			
	1.3 Describe organisational procedures for working with hardware and equipment and for recording information			
	1.4 Explain the importance of product specifications and customer requirements when carrying out work activities			
	1.5 Explain how regulatory requirements affect planned work activities			
	1.6 Explain the importance of security when working on IT and telecoms systems			
	1.7 Explain the importance of registering new hardware products			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Plan work activities on IT and telecoms hardware and equipment	2.1 Plan activities for working with hardware and equipment to meet given requirements			
	2.2 Explain how to ensure that planned work activities cause minimum disruption to users of the system			
	2.3 Explain how to design work plans to ensure the integrity and security of any stored data			
	2.4 Ensure that any necessary work permissions have been obtained before commencing work activities			
	2.5 allocate the resources and materials required to carry out planned work activities in accordance with work plans			
	2.6 Identify tools hardware, equipment and methods for use in the planned work activities			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Carry out work activities on IT and telecoms hardware and equipment	3.1 Use and handle tools and materials safely and in accordance with relevant guidelines and instructions when carrying out work activities			
	3.2 Provide technical advice to support the work activities of immediate colleagues			
	3.3 Set configuration options in line with work plans			
	3.4 Operate tools, hardware and equipment in line with methods identified in planned work activities			
	3.5 Record information on work activities in line with organisational requirements			
	3.6 Check that all hardware has been registered in line with organisational procedures			
	3.7 Communicate progress and the outcomes of work in line with organisational requirements			
	3.8 Follow organisational procedures and relevant legislation or regulations when carrying out work activities			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 49: Working with IT and Telecoms Hardware and Equipment 3

Unit code:	**WHE3**
Unit reference number:	**UC70 04**
SCQF level:	**8**
SCQF credit value:	**14**

Unit summary

This unit gives learners the skills and understanding needed to take on a supervisory or leadership role dealing with IT and telecoms hardware and equipment. This can include cabling, PC boards, racks, rack mounted equipment, poles, masts, aerials and large computer systems. Work can be carried out on, for example, single or networked systems or a telephone exchange.

Assessment methodology

This unit must be assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand how to work with IT and telecoms hardware and equipment	1.1 Explain the importance of planning IT and telecoms work activities			
	1.2 Explain the factors which determine the applicability of tools and techniques to specific work activities			
	1.3 Explain organisational requirements and procedures for working with hardware and equipment			
	1.4 Discuss the importance of product specifications and customer requirements when planning work activities			
	1.5 Evaluate how regulatory requirements will affect planned work activities			
	1.6 Assess the security implications of planned work activities			
	1.7 Explain the importance of registering new hardware products			
2 Plan work on IT and telecoms hardware and equipment	2.1 Create work plans to meet requirements			
	2.2 Ensure that work plans cause minimum disruption to users of the system			
	2.3 Ensure that work plans maintain the integrity and security of any stored data			
	2.4 Obtain any necessary work permissions before commencing work activities			
	2.5 Ensure that the resources and materials required by work plans are available			
	2.6 Specify, and where necessary adapt, the tools hardware, equipment and methods to be used			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Control work activities on IT and Telecoms hardware and equipment	3.1 Develop procedures for the safe use of tools and materials in accordance with relevant guidelines and instructions			
	3.2 Provide technical advice to support the work activities of others			
	3.3 Ensure that configuration options have been set in line with work plans			
	3.4 Ensure that tools, hardware and equipment are operated in line with methods identified in work plans			
	3.5 Develop documentation for recording information on work activities			
	3.6 Ensure that all hardware has been registered in line with organisational procedures			
	3.7 Communicate progress and the outcomes of work in line with organisational requirements			
	3.8 Contribute to the development of organisational strategy for work activities			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 50: Data Representation and Manipulation for IT and Telecoms 1

Unit code: **DRM1**

Unit reference number: **UC71 04**

SCQF level: **5**

SCQF credit value: **8**

Unit summary

This unit introduces mathematical concepts (number and co-ordinate systems, functions and Boolean algebra) and their application to the development of computer programs.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Manipulate real numbers and integers	1.1 Describe the difference between real numbers and integers			
	1.2 Express numbers in power and scientific notation			
	1.3 Perform arithmetic on numbers in power and scientific notation including multiplication and division of powers			
	1.4 Round real numbers and estimate the resulting error			
	1.5 Describe how real numbers and integers are represented in computer memory			
2 Use co-ordinate systems and vectors, and linear transformations	2.1 Describe two dimensional co-ordinate systems			
	2.2 Represent simple shapes by finding the co-ordinates of the vertices			
	2.3 Describe vectors			
	2.4 Produce the polar representation of vectors			
	2.5 Offset and scale shapes described by co-ordinates			
	2.6 Convert between linear and polar co-ordinates			
	2.7 Describe co-ordinate systems used in programming output devices			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Use simple functions and basic algebraic operations	3.1 Express simple problems as mathematical equations			
	3.2 Simplify and change the subject of simple equations			
	3.3 Describe the concept of a function			
	3.4 Obtain the equation of a straight line from a graph			
	3.5 Describe the basic properties of a circle and triangle			
	3.6 Apply trigonometric and inverse trigonometric functions			
4 Apply Boolean algebra to problem situations	4.1 Describe how binary states can be used to represent physical systems			
	4.2 Identify and label the inputs and outputs of a binary representation			
	4.3 Produce a truth table corresponding to a binary representation			
	4.4 Express a truth table as a Boolean equation			
	4.5 Simplify a Boolean equation using algebraic methods			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 51: Data Representation and Manipulation for IT and Telecoms 2

Unit code: DRM2

Unit reference number: UC72 04

SCQF level: 6

SCQF credit value: 8

Unit summary

This unit introduces mathematical concepts (matrices, series and graphs) and their application to the development of computer programs.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Apply matrix methods	1.1 Explain matrices as a method of representing ordered data and their relationship with computer program variable arrays			
	1.2 Use index notation to reference the cells of a matrix			
	1.3 Perform add, subtract and scalar multiplication operations on a matrix			
	1.4 Multiply two matrices			
	1.5 Find: • the inverse of a matrix by elementary row operations • the transpose of a matrix			
	1.6 Apply matrix techniques to a range of applications including: • solving simultaneous linear equations • vector transformation and rotation • maps and graphs			
2 Apply series, probability and recursions	2.1 Give a functional expression for a series			
	2.2 Express a series recursively			
	2.3 Find the sum of a series			
	2.4 Express probabilities as percentages, fractions and decimals			
	2.5 Apply series, probability and recursion techniques to develop a solution to a range of problems			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Apply graph theory	3.1 Describe the components of a graph and their properties			
	3.2 Explain the characteristics of undirected, directed and mixed graphs			
	3.3 Represent a set of connected objects as a graph			
	3.4 Describe the type of problem which can be modelled by a weighted graph			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 52: Data Modelling 1

Unit code: DM1

Unit reference number: UC73 04

SCQF level: 5

SCQF credit value: 4

Unit summary

This unit covers the use of simple logical data modelling techniques in the design of data structures for computer systems.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Know the concepts of logical data modelling	1.1 Identify entities, attributes and relationships			
	1.2 State the objectives of data normalisation and describe how the process is carried out			
	1.3 Describe the purpose of keys			
2 Use data modelling techniques to create logical data models	2.1 Identify and name entities and their attributes, assigning the correct type and size			
	2.2 Identify and represent appropriate entity relationships			
	2.3 Use a standard notation to create a logical data model of a normalised data set			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 53: Data Modelling 2

Unit code: DM2

Unit reference number: UC74 04

SCQF level: 6

SCQF credit value: 6

Unit summary

This unit covers the use of logical data modelling techniques, including normalisation, in the design of data structures for computer systems.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand the concepts of logical data modelling	1.1 Describe entities and the types of attributes which can be assigned to them			
	1.2 Describe the type of relationships which can exist between entities			
	1.3 Explain the objectives of data normalisation and describe the Third Normal Form (3NF)			
	1.4 Explain the types of keys and their use			
	1.5 Describe an application where un-normalised or de-normalised data may be used			
	1.6 Describe the types of standard notation which can be used to represent data sets as logical data models			
2 Use logical data modelling techniques	2.1 Identify and name entities, assigning the correct attributes			
	2.2 Identify and represent entity relationships, assigning the correct type			
	2.3 Normalise a data set to Third Normal Form (3NF)			
3 Use data modelling techniques to create and refine logical data models	3.1 Identify entities which will be accessed for enquiry and/or update			
	3.2 Identify access sequences and triggers			
	3.3 Create access rules/methods			
	3.4 Use a standard notation to represent the logical data model of an un-normalised data set			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 54: Computer Games Development 1

Unit code: **CGD1**

Unit reference number: **UC75 04**

SCQF level: **5**

SCQF credit value: **4**

Unit summary

This unit introduces computer game components and the computer games industry. It also covers the fundamentals of developing computer games.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand computer game components	1.1 Identify the hardware and software components of a computer game system			
	1.2 Identify the activities required to develop modern computer games			
	1.3 Identify the components required to develop a computer game			
	1.4 Describe the features of an existing computer game			
2 Be able contribute to the development of a computer game specification	2.1 Outline the purpose of a pre-production proposal document and an implementation plan			
	2.2 Contribute to the production of a pre-production proposal document for a computer game project			
	2.3 Contribute to the production of an implementation plan for a computer game development			
3 Be able to implement a component of a computer game	3.1 Design a component of a computer game			
	3.2 Develop a component of a computer game			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 55: Computer Games Development 2

Unit code: CGD2

Unit reference number: UC76 04

SCQF level: 6

SCQF credit value: 7

Unit summary

This unit is about the knowledge and skills required to design, develop and test computer games. The learner will gain an appreciation of the computer games industry and the development process for game components.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand computer game components	1.1	Describe the hardware and software components of a computer game system			
2	Understand the processes of computer games development	2.1	Describe the stages of the evolution of computer games			
		2.2	Describe the roles and activities required to develop computer games			
		2.3	Explain computer game development processes and terminology			
		2.4	Explain computer game programming methods and techniques			
3	Be able to evaluate existing computer games	3.1	Produce an evaluation of an existing computer game			
4	Be able to develop a computer game specification	4.1	Describe the purpose of a pre-production proposal document and an implementation plan			
		4.2	Identify the components required to develop a computer game			
		4.3	Produce a pre-production proposal document for a computer game project			
		4.4	Produce an implementation plan for a computer game development			
5	Be able to Implement components of a computer game	5.1	Design components of a computer game			
		5.2	Develop components of a computer game			
		5.3	Test components of a computer game			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 56: System Architecture 1

Unit code: SA1

Unit reference number: UC77 04

SCQF level: 5

SCQF credit value: 6

Unit summary

This unit gives learners basic knowledge of how data is represented and processed in computer systems. They will develop an understanding of the features and functions of a computer operating system for distributed systems.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Know the representation of information within a computer	1.1	Outline how number systems and data representation are used to store information in a computer			
		1.2	Identify the role of input, output and storage devices			
		1.3	List the characteristics of C.P.U. components and outline the operation of the Fetch Execute Cycle			
		1.4	Outline the operation of a peripheral device			
2	Know and use an operating environment	2.1	Describe the purpose of an operating system			
		2.2	Use operating system interfaces and functions			
		2.3	Describe the methods of process management in computer operating systems			
		2.4	Identify how operating system features can contribute to data and system security			
3	Know the principles of distributed computer operations	3.1	Outline the function and operation of operating systems used in distributed computer systems			
		3.2	Describe the functions of computer networking devices			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 57: System Architecture 2

Unit code: SA2

Unit reference number: UC78 04

SCQF level: 6

SCQF credit value: 8

Unit summary

This unit gives learners an understanding of the computer architecture for distributed systems. They will develop an understanding of the features and functions of a computer operating system and be able to configure it for use.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand the representation of information within a computer and the way it is processed	1.1 Describe how number systems and data representation are used to store and process different types of data			
	1.2 Describe the operation of input, output and storage devices using correct technical terminology			
	1.3 Describe the characteristics of C.P.U. components and the operation of the Fetch Execute Cycle			
2 Use and configure operating systems	2.1 Use and configure operating system interfaces			
	2.2 Use and configure operating system functions to improve performance			
	2.3 Describe how concurrent processes are managed in computer operating systems			
	2.4 Describe how operating system features can contribute to data and system security			
3 Understand the principles of distributed computer operations	3.1 Outline the features of different architectures of distributed computer systems			
	3.2 Describe the functions and operation of operating systems used in distributed computer systems			
	3.3 Describe the operation of computer networking devices			
	3.4 Describe the characteristics and operation of distributed applications			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 58: System Architecture 3

Unit code: SA3

Unit reference number: UC79 04

SCQF level: 7

SCQF credit value: 8

Unit summary

This unit gives learners a detailed understanding of the computer architecture for distributed systems. They will further their understanding of the features and functions of a computer operating system and be able to configure it according to different requirements.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand the representation of information within a computer and the way it is processed	1.1 Explain how number systems and data representation are used to store and process information in a computer			
	1.2 Explain the characteristics of C.P.U. components and the operation of the Fetch Execute Cycle			
	1.3 Describe the operation of a peripheral device, controller hardware and physical connection using correct technical terminology and reference to relevant standards			
2 Use and configure the operating environment of current computer systems	2.1 Install and configure an operating system to meet requirements			
	2.2 Use and configure operating system functions to optimise performance			
	2.3 Explain how concurrent processes are managed in computer operating systems			
	2.4 Explain how operating system features can contribute to data and system security			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Understand the principles of distributed computer operations	3.1 Describe the features of different architectures of distributed computer systems			
	3.2 Describe the functions and operation of computer operating systems used in distributed computer systems			
	3.3 Explain the operation of computer networking devices			
	3.4 Explain the characteristics and operation of distributed applications			
	3.5 Explain methods to implement data and system security in distributed computer systems			
	3.6 Describe methods to improve performance of distributed computer systems			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 59: Web Development 1

Unit code: **WD1**

Unit reference number: **UC80 04**

SCQF level: **5**

SCQF credit value: **7**

Unit summary

This unit provides an understanding of web architecture, components and technologies. It also covers the development of a specification for a website and implementation of website elements.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Know web architecture and components	1.1 List the hardware and software components which enable the internet and web			
	1.2 State the role of the TCP/IP protocol			
	1.3 State the role of internet service providers, web hosting services and domain name registrars			
	1.4 Identify available types of web functionality			
2 Know about the technologies used to build and operate websites	2.1 State the purpose of markup languages and list commonly used examples			
	2.2 Identify the roles of:			
	• web runtime environments			
	• web application programming languages			
	• databases			
	• in building websites and web applications			
	2.3 Identify typical product stack combinations that can be used for web development			
3 Implement specified components of a web-site	3.1 State the components required to produce a web-site			
	3.2 Design specified components of a web-site			
	3.3 Develop specified components of a web-site			
	3.4 Test specified components of a web-site			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 60: Web Development 2

Unit code: WD2

Unit reference number: UC81 04

SCQF level: 6

SCQF credit value: 12

Unit summary

This unit provides a more detailed understanding of web architecture, components and technologies. It also covers the development of a specification for a website and implementation of website elements.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand web architecture and components	1.1	Describe the hardware and software components which enable the internet and web			
		1.2	Explain the role of network protocols in web architecture			
		1.3	Explain the role of internet service providers, web hosting services and domain name registrars			
		1.4	Describe available types of web components			
2	Understand the technologies that can be used to build and operate a website	2.1	Explain the use of markup languages			
		2.2	Explain the use and functionality of:			
			• web runtime environments			
			• web application programming languages			
		2.3	Explain the role of databases in building websites and web applications			
		2.4	Identify typical product stack combinations that can be used for web development			
3	Produce a website design for a given brief	3.1	Produce a proposal document for a web-site design			
		3.2	Identify the components required by a web-site design			
		3.3	Produce an implementation plan for a web-site development project			
4	Implement a website from a design specification	4.1	Develop a fully functional website to meet requirements			
		4.2	Test a website and review against requirements			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 61: Web Development 3

Unit code: WD3

Unit reference number: UC82 04

SCQF level: 7

SCQF credit value: 15

Unit summary

This unit gives learners the skills and competencies to carry out a website development from design to testing in a professional capacity. Learners will gain understanding of a range of issues concerned with web-development activities.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Design a website to address loosely-defined requirements	1.1 Identify the key design features inherent within a requirements specification			
	1.2 Use planning tools and techniques to create a site map			
	1.3 Evaluate different design models and select the most appropriate to meet requirements			
2 Build websites to address well-defined specifications	2.1 Explain the advantages and disadvantages of various web development methodologies and technologies			
	2.2 Select and use a variety of web development tools			
	2.3 Describe the use of XHTML to develop websites			
	2.4 Write the source code for web pages in clean XHTML according to a specification			
	2.5 Describe how to use CSS to standardise the overall style of a website			
	2.6 Write the source code for CSS web pages according to a specification			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Understand the technology and tools needed to use multimedia in the context of a website	3.1 Explain the advantages and disadvantages of various types of multimedia file format			
	3.2 Explain the advantages and disadvantages of different types of multimedia element in relation to different contexts			
	3.3 Embed functional multimedia components in a website			
4 Understand the technology and tools needed to store, retrieve and manipulate external data in the context of a website	4.1 Describe how database components can be linked to a website			
	4.2 Embed database components in a website			
5 Plan and implement testing of a website	5.1 Develop and apply a test strategy consistent with the design			
	5.2 Determine expected test results			
	5.3 Record actual test results to enable comparison with expected results			
	5.4 Analyse actual test results against expected results to identify discrepancies			
	5.5 Investigate test discrepancies to identify and rectify their causes			
	5.6 Explain the need for testing on different platforms and browsers			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 62: Introduction to IT and Telecoms Systems Development

Unit code: **ITSD**

Unit reference number: **UC83 04**

SCQF level: **5**

SCQF credit value: **6**

Unit summary

This unit covers the investigation of existing systems and processes and the analysis of information to identify needs and constraints.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand IT and telecoms systems and the roles of personnel	1.1	Explain the role of IT and telecoms systems in society			
		1.2	Describe the major components of a contemporary IT or telecoms system			
		1.3	Describe the roles of personnel in the development, operation and use of IT or telecoms system			
2	Understand Systems Development Life Cycle (SDLC) models	2.1	Describe top down, bottom up and integrated approaches to systems development			
		2.2	Explain the purposes of the initiation, analysis, design and implementation phases of the IT SDLC			
		2.3	Identify the advantages and disadvantages of the traditional ('waterfall') SDLC model			
		2.4	Describe two other SDLC models, identifying the type of development for which they are suited			
3	Understand systems development processes	3.1	Describe the advantages and disadvantages of different solution types			
		3.2	Explain the importance of quality assurance and meeting customer requirements during the SDLC and the means by which they can be achieved			
		3.3	Describe the applicability of different methods of gathering information to inform systems development			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 63: Software Design Fundamentals

Unit code: SDF

Unit reference number: UC84 04

SCQF level: 7

SCQF credit value: 8

Unit summary

This unit introduces the principles of software design and the application of software design techniques.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand the principles of software design	1.1 Describe the role of software design and computer programming in the IT Systems Development Life Cycle (SDLC)			
	1.2 Describe the application and limits of the procedural, object oriented and event driven programming paradigms and the available supporting tools and environments			
	1.3 Explain sequence, selection and iteration as used in computer programming			
	1.4 Explain abstraction of data and code in computer programming			
	1.5 Explain the use of predefined data and code in computer programming			
	1.6 Explain the importance of the understandability of code and how this can be improved by naming, comments and layout			
	1.7 Describe how • efficiency • reliability • robustness • usability • portability • maintainability • contribute to the quality of code			

Learning outcomes	Assessment criteria		Evidence type	Portfolio reference	Date
2 Be able to apply the principles of software design	2.1	Develop algorithms to represent problems			
	2.2	Define data and file storage requirements including predefined data items			
	2.3	Define program structures including predefined code items			
	2.4	Describe required inputs and outputs			
	2.5	Use tools to express software designs			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 64: Networking Principles 1

Unit code: NET1

Unit reference number: UC85 04

SCQF level: 5

SCQF credit value: 6

Unit summary

This unit gives learners knowledge of different network infrastructure topologies, the advantages and disadvantages of different types of network, the media access control methods and the protocols used in local area networks.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Know different network infrastructure topologies	1.1 Describe logical and physical network topologies as given in the IEEE802 standards for LANs and WANs			
	1.2 Describe the different types of network cabling systems and their associated connectors			
	1.3 Describe the different types of wireless LAN			
	1.4 List the functions of repeaters, bridges, switch routers and gateways, identifying their roles in a network topology			
	1.5 Describe the difference between passive, active and intelligent hubs			
2 Know the OSI model and the TCP/IP suite	2.1 State the function of the OSI model layers			
	2.2 List the TCP/IP protocols			
	2.3 List the types of addresses used on networks and why they are used			
3 Know the advantages and disadvantages of different types of network	3.1 Describe the properties of different types of networks			
	3.2 Describe the advantages and disadvantages of different types of networks			
4 Know media access control methods and protocols used in local area networks	4.1 Describe types of media access control methods used in networked systems			
	4.2 Describe protocols used in networked systems			
	4.3 Explain what is meant by a collision and how network systems deal with them			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 65: Networking Principles 2

Unit code: NET2

Unit reference number: UC86 04

SCQF level: 6

SCQF credit value: 10

Unit summary

This unit gives learners the skills and understanding required to design, install and maintain networked systems. The unit covers topologies, the OSI model and TCP/IP.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand physical and logical network topologies	1.1 Describe common physical network topologies			
	1.2 Explain the difference between logical and physical network topologies			
	1.3 Describe the functions and role of hardware and software components used to implement common data communication systems			
	1.4 Identify the bandwidth limitations of different types of network cabling and connectors			
	1.5 Describe the different types of wireless standards			
2 Understand the Open System Interconnection (OSI) model	2.1 Describe the OSI model and how its layers relate to each other			
	2.2 Explain the function of each layer of the OSI model			
	2.3 Describe the key features, protocols and standards of each OSI layer			
3 Understand the Internet Protocol Suite (TCP/IP)	3.1 Explain the Internet Protocol Suite (TCP/IP) and the function of its four layers			
	3.2 Describe the key features, protocols and standards of each TCP/IP layer			
	3.3 Explain how TCP and IP protocols are used to facilitate delivery of data packets			
	3.4 Explain how TCP/IP relates to the OSI model			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Design a LAN infrastructure to meet a given requirement	4.1 Design a routed network to meet given specification 4.2 Select the components required to construct and configure the network 4.3 Describe how network security would be implemented 4.4 Prepare a test plan			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 66: Telecommunications Principles 1

Unit code:	**TP1**
Unit reference number:	**UC87 04**
SCQF level:	**5**
SCQF credit value:	**7**

Unit summary

This unit gives learners knowledge of the basic principles underpinning telecommunications, including the electromagnetic spectrum, circuits and transmission lines, transmission of binary information, analogue/digital signals, and multiplexing.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Know the electromagnetic spectrum as applied to telecommunications	1.1 Describe the physical properties of electromagnetic radiation			
	1.2 Describe the relationship between frequency and wavelength			
	1.3 List the principal bands of the electromagnetic spectrum and their associated frequencies and wavelengths			
	1.4 Identify the main telecommunications applications of electromagnetic radiation			
2 Know the relationship between telecommunication circuits and transmission lines	2.1 Identify the circuit properties (Resistance, Capacitance, Inductance and Leakance) of alternating current (AC) circuits			
	2.2 Describe the effects of circuit properties on transmission lines			
	2.3 Design an equivalent circuit model of a transmission line using the primary line constants			
	2.4 Describe characteristic impedance in transmission lines including open circuit, short circuit and matched termination			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how binary information is transmitted as a digital signal	3.1 Describe the properties of digital signals including frequency, mark space ratio and triggered timing			
	3.2 Describe the advantages of digital signals in terms of regeneration, accuracy and recovery			
	3.3 State why digital signals need to be modulated onto an analogue carrier			
	3.4 Use keying to demonstrate how a digital signal is modulated onto an analogue carrier			
4 Understand how an analogue signal is converted to a digital signal	4.1 Explain different ways of converting an analogue signal to a digital signal			
	4.2 Explain linear and non-linear forms of encoding			
	4.3 Calculate signal to noise quantisation errors			
	4.4 Explain Aliasing in telecommunications terms and how it can be overcome			
	4.5 Explain the use, and limitations of the Nyquist rule in signal sampling			
5 Know signal multiplexing	5.1 Describe frequency, synchronous and asynchronous signal multiplexing			

Learner name: _____   Date:_____

Learner signature: _____   Date:_____

Assessor signature: _____   Date:_____

Internal verifier signature: _____   Date:_____
(*if sampled*)

Unit 67: Telecommunications Principles 2

Unit code: TP2

Unit reference number: UC88 04

SCQF level: 7

SCQF credit value: 10

Unit summary

This unit gives learners knowledge of further principles underpinning telecommunications, including alternating circuits, line impairments, transmission line characteristics, transmission of digital signals, modulation and multiplexing.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand the principles of alternating current (AC) circuits	1.1 Explain reactance in circuits 1.2 Explain impedance in terms of resistive and reactive components 1.3 Explain the characteristics of series and parallel resonant circuits 1.4 Calculate the resonant frequency of a circuit			
2 Understand the effects of line impairments on a transmitted signal	2.1 Explain the concept of decibel (dB) as a unit of loss 2.2 Explain the concept of dBm as a unit of power 2.3 Define the concept of signal-to-noise ratio as applied to transmission lines 2.4 Calculate using dBs and dBms the • total loss of a system from individual losses • total loss of a system from input and output signal levels • output signal level from total loss and input signal level • signal-to-noise ratios			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Be able to apply the characteristics of transmission lines	3.1 Demonstrate the importance of the primary line constants in transmission lines			
	3.2 Explain the effect of the primary line constants R, G, L and C on the characteristic impedance of transmission lines			
	3.3 Define the concept of angular frequency as applied to transmission lines			
	3.4 Calculate the characteristic impedance of finite and infinite line lengths using the primary line constants			
	3.5 Calculate the characteristic impedance of a parallel pair of wires and co-axial cable			
	3.6 Produce an equivalent circuit model of a transmission line in terms of resistance, capacitance and inductance			
	3.7 Calculate the bandwidth of a transmission line in terms of frequency between half power points			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Understand the transmission of digital signals over transmission media	4.1 Demonstrate the representation of binary information and explain the advantages of each type • non-return to zero (NRZ) digital encoding from given values • return to zero (RTZ) digital encoding from given values • bi-phase digital encoding (Manchester) from given values • bi-phase digital encoding (Differential Manchester) from given values 4.2 Explain the concept of bit rate and bit error rate (BER) 4.3 Explain digital signal impairments in terms of delay, jitter and binary errors 4.4 Explain the effects of delay, limited bandwidth and jitter on the extraction of binary information from a digital signal			
5 Understand the process of modulating an analogue carrier frequency using digital signals	5.1 Explain digital modulation using analogue frequency carriers including: • shift keying • constellation diagrams • channel capacity calculation 5.2 Explain the need for filters and their effect on digitally modulated signals 5.3 Calculate the Baud rate of given link states using given values			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Understand multiplexing digital and analogue signals over transmission media	6.1 Explain the concept of: • frequency division multiplexing • synchronous time division multiplexing • asynchronous time division multiplexing • digital time division multiplexing • code division multiplexing • Wavelength division multiplexing • coarse wavelength division multiplexing • dense wavelength division multiplexing			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 68: Fibre Telecommunications Techniques

Unit code: **FIBRE**

Unit reference number: **UC89 04**

SCQF level: **6**

SCQF credit value: **15**

Unit summary

This unit enables the learner to develop the skills, knowledge and understanding requirement to safely install and maintain components in an optical fibre telecommunications network.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand the properties, structures and components included in typical fibre telecommunication networks	1.1 Describe the different types of optical fibre 1.2 Describe the physical components required to build a fibre infrastructure 1.3 Describe the different structures used in fibre networks 1.4 Explain when different fibre network structures should be used			
2 Understand safe working practices when working with optical fibre networks	2.1 Identify key safety considerations when working with optical fibre 2.2 Identify any existing risk assessments for working with optical fibre 2.3 Explain how to dispose of redundant or damaged optical fibres			
3 Know the quality standards and documentation requirements when working on the optical fibre network	3.1 Explain the quality standards applicable for installation and maintenance work on the optical fibre network 3.2 Explain the technical documentation required before and after undertaking work on the fibre network			
4 Be able to prepare and install optical fibre components in exchanges and customer premises	4.1 Prepare optical fibre components for use 4.2 Provide fibres from a customer premises point of entry to the equipment fibre pigtails for both two-fibre and single-fibre working 4.3 Test components before commissioning the components			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Be able to build an external fibre network	5.1 Prepare cables for splicing			
	5.2 Manage cables on single circuit trays			
	5.3 Splice fibres cables on single circuit trays			
6 Be able to construct and re-enter a fibre closure	6.1 Explain where various fibre options should be used			
	6.2 Construct a fibre closure			
	6.3 Re-enter an existing closure			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 69: Using the Internet 1

Unit code: INT1

Unit reference number: UC90 04

SCQF level: 4

SCQF credit value: 3

Unit summary

This unit is about connecting to the internet and applying browser skills to navigate, search and communicate online. Learners will develop an understanding of basic internet security. Any aspect that is unfamiliar will require support and advice from others.

Internet tools and techniques will be defined as 'basic' because:

- the software tools and functions will be pre-determined or commonly used; and

- the range of techniques used for searching and exchanging information will be familiar or commonly undertaken.

An activity will typically be 'straightforward or routine' because:

- the task or context will be familiar and involve few factors (for example time available, audience needs, content, structure); and

- the input and output of information will be predetermined by the person supervising the task.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Connect to the internet	1.1	Identify different types of connection methods that can be used to access the internet			
		1.2	Access the internet or intranet			
2	Use browser software to navigate web pages	2.1	Use browser tools to navigate web pages			
		2.2	Identify when to change browser settings to aid navigation			
		2.3	Adjust browser settings to meet needs			
		2.4	Use browser help facilities			
3	Use browser tools to search for information from the internet	3.1	Select and use appropriate search techniques to locate information			
		3.2	Outline how information meets requirements			
		3.3	Use references to make it easier to find information another time			
		3.4	Download and save different types of information from the internet			
4	Use browser software to communicate information online	4.1	Select and use tools and techniques to communicate information online			
		4.2	Use browser tools to share information sources with others			
		4.3	Submit information online using forms or interactive sites			
		4.4	Identify opportunities to post or publish material to websites			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Follow and understand the need for safety and security practices when working online	5.1 Identify the threats to user safety when working online 5.2 Outline how to minimise internet security risks 5.3 Work responsibly and take appropriate safety and security precautions when working online 5.4 Keep personal information secure 5.5 Follow relevant laws, guidelines and procedures for the use of the internet			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 70: Using the Internet 2

Unit code: INT2

Unit reference number: UC91 04

SCQF level: 5

SCQF Credit value: 4

Unit summary

This unit is about connecting to the internet and applying browser skills to navigate, search and communicate online. Learners will develop an understanding of basic internet security. They will use internet software tools and techniques to search for and exchange information for, at times, non-routine or unfamiliar activities. Any aspect that is unfamiliar may require support and advice from others.

Internet tools and techniques at this level will be defined as:

- the software tools and functions will be at times non-routine or unfamiliar; and

- the range of techniques used for searching and exchanging information will involve a number of steps and at times be non-routine or unfamiliar.

An activity will typically be 'non-routine or unfamiliar' because:

- the task or context is likely to require some analysis, clarification or research (to separate the components and to identify what factors need to be considered, for example, time available, audience needs, accessibility of source, types of content and meaning) before an approach can be planned; and

- the user will take some responsibility for the selecting how to search for and exchange the information.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Connect to the internet	1.1 Identify different types of connection methods that can be used to access the internet			
	1.2 Identify the benefits and drawbacks of the connection method used			
	1.3 Get online with an internet connection			
	1.4 Use help facilities to solve internet connection problems			
2 Use browser software to navigate web pages effectively	2.1 Select and use browser tools to navigate web pages			
	2.2 Identify when to change settings to aid navigation			
	2.3 Adjust browser settings to optimise performance and meet needs			
	2.4 Identify ways to improve the performance of a browser			
3 Use browser tools to search for information from the internet	3.1 Select and use appropriate search techniques to locate information efficiently			
	3.2 Describe how well information meets requirements			
	3.3 Manage and use references to make it easier to find information another time			
	3.4 Download, organise and store different types of information from the internet			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Use browser software to communicate information online	4.1	Identify opportunities to create, post or publish material to websites			
		4.2	Select and use appropriate tools and techniques to communicate information online			
		4.3	Use browser tools to share information sources with others			
		4.4	Submit information online			
5	Understand the need for safety and security practices when working online	5.1	Describe the threats to system performance when working online			
		5.2	Work responsibly and take appropriate safety and security precautions when working online			
		5.3	Describe the threats to information security when working online			
		5.4	Manage personal access to online sources securely			
		5.5	Describe the threats to user safety when working online			
		5.6	Describe how to minimise internet security risks			
		5.7	Apply laws, guidelines and procedures for safe and secure internet use			
		5.8	Explain the importance of the relevant laws affecting internet users			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 71: Using the Internet 3

Unit code: INT3

Unit reference number: UC92 04

SCQF level: 6

SCQF credit value: 5

Unit summary

This unit is about the skills and knowledge needed by the IT user to advise on and set up an internet connection to meet a variety of user needs. They can also make efficient use of advanced internet software tools and techniques to search for and exchange information for complex and non-routine activities.

Internet tools and techniques will be defined as 'advanced' because:

- the software tools and functions required will be described as complex because at times they involve using a tool or function to, for example; improve efficiency, create an effect, explore technical support etc

- the range of techniques required for searching and exchanging information will be complex, and the selection process may involve research, identification and application.

An activity will typically be 'complex and non-routine' because:

- the task is likely to require research, identification and application;

- the context is likely to require research, analysis and interpretation; and

- the user will take full responsibility for searching for and exchanging the information.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Select and set up an appropriate connection to access the internet	1.1	Identify different types of connection methods that can be used to access the internet			
		1.2	Explain the benefits and drawbacks of different connection methods			
		1.3	Analyse the issues affecting different groups of users			
		1.4	Select and set up an Internet connection using an appropriate combination of hardware and software			
		1.5	Recommend a connection method for internet access to meet identified needs			
		1.6	Diagnose and solve internet connection problems			
2	Set up and use browser software to navigate web pages	2.1	Select and use browser tools to navigate web pages effectively			
		2.2	Explain when to change browser settings to aid navigation			
		2.3	Adjust and monitor browser settings to maintain and improve performance			
		2.4	Explain when and how to improve browser performance			
		2.5	Customise browser software to make it easier to use			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Use browser tools to search effectively and efficiently for information from the internet	3.1 Select and use appropriate search techniques to locate information efficiently			
	3.2 Evaluate how well information meets requirements			
	3.3 Manage and use references to make it easier to find information another time			
	3.4 Download, organise and store different types of information from the internet			
4 Use browser software to communicate information online	4.1 Identify and analyse opportunities to create, post or publish material to websites			
	4.2 Select and use appropriate tools and techniques to communicate information online			
	4.3 Share and submit information online using appropriate language and moderate content from others			
5 Develop and apply appropriate safety and security practices and procedures when working online	5.1 Explain the threats to system performance when working online			
	5.2 Work responsibly and take appropriate safety and security precautions when working online			
	5.3 Explain the threats to information security and integrity when working online			
	5.4 Keep information secure and manage user access to online sources securely			
	5.5 Explain the threats to user safety when working online			
	5.6 Explain how to minimise internet security risks			
	5.7 Develop and promote laws, guidelines and procedures for safe and secure use of the internet			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 72: Using Email 1

Unit code: EML1

Unit reference number: UC93 04

SCQF level: 4

Credit value: 2

Unit summary

This unit is about the skills and techniques needed to use a range of basic email software tools. Learners will use these tools to send, receive and store messages for straightforward or routine activities. Any aspect that is unfamiliar will require support and advice from others.

Email tools and techniques will be defined as 'basic' because:

- the software tools and functions will be predetermined or commonly used; and

- the techniques used will be familiar or commonly undertaken.

An activity will typically be 'straightforward or routine' because:

- the task or context will be familiar and involve few factors (for example time available, audience needs, content, structure); and

- the input and output of information will be predetermined by the person supervising the task.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Use e-mail software tools and techniques to compose and send messages	1.1 Use software tools to compose and format e-mail messages			
	1.2 Attach files to e-mail messages			
	1.3 Send e-mail messages			
	1.4 Identify how to stay safe and respect others when using e-mail			
	1.5 Use an address book to store and retrieve contact information			
2 Manage incoming email effectively	2.1 Follow guidelines and procedures for using e-mail			
	2.2 Identify when and how to respond to e-mail messages			
	2.3 Read and respond to e-mail messages appropriately			
	2.4 Identify what messages to delete and when to do so			
	2.5 Organise and store e-mail messages			
	2.6 Respond appropriately to common e-mail problems			

Learner name: _____   Date:_____

Learner signature: _____   Date:_____

Assessor signature: _____   Date:_____

Internal verifier signature: _____   Date:_____
(*if sampled*)

Unit 73: Using Email 2

Unit code: EML2

Unit reference number: UC94 04

SCQF level: 5

SCQF credit value: 3

Unit summary

This unit is about the skills and knowledge needed to make effective use of a range of intermediate email software tools. Learners will use these tools to send, receive and store messages for, at times, non-routine or unfamiliar activities. Any aspect that is unfamiliar may require support and advice from others.

Email tools and techniques will be defined as 'intermediate' because:

- the software tools and functions will be at times non-routine or unfamiliar; and

- the techniques required will involve a number of steps and at times be non-routine or unfamiliar.

An activity will typically be 'non-routine or unfamiliar' because:

- the task or context is likely to require some analysis, clarification or research (to separate the components and to identify what factors need to be considered, for example, time available, audience needs, accessibility of source, types of content and meaning) before an approach can be planned; and

- the user will take some responsibility for developing the input or output of information.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Use e-mail software tools and techniques to compose and send messages	1.1 Select and use software tools to compose and format e-mail messages, including attachments			
	1.2 Determine the message size and how it can be reduced			
	1.3 Send e-mail messages to individuals and groups			
	1.4 Describe how to stay safe and respect others when using e-mail			
	1.5 Use an address book to organise contact information			
2 Manage incoming e-mail effectively	2.1 Follow guidelines and procedures for using e-mail			
	2.2 Read and respond to e-mail messages appropriately			
	2.3 Use email software tools and techniques to automate responses			
	2.4 Describe how to archive e-mail messages, including attachments			
	2.5 Organise, store and archive e-mail messages effectively			
	2.6 Respond appropriately to e-mail problems			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 74: Using Email 3

Unit code: EML3

Unit reference number: UC95 04

SCQF level: 6

SCQF credit value: 3

Unit summary

This unit is about the skills and knowledge needed to help others to make more efficient use of email software tools. Learners will use these tools to send, receive and store messages for complex and non-routine activities.

Email tools and techniques will be defined as 'advanced' because:

- the techniques required will be multi-step and complex, and the selection process may involve research, identification and application; and

- the IT tools required will be complex and at times involve having the idea that there may be a tool or function to do something (for example improve efficiency or create an effect), exploring technical support, self-teaching and applying.

An activity will typically be 'complex and non-routine' because:

- the task is likely to require research, identification and application

- the context is likely to require research, analysis and interpretation; and

- the user will take full responsibility for developing both the input and output type and structure of the information.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Use e-mail software tools and techniques to compose and send messages	1.1 Select and use software tools to compose and format e-mail messages, including attachments			
	1.2 Explain methods to improve message transmission			
	1.3 Send e-mail messages to individuals and groups			
	1.4 Explain why and how to stay safe and respect others when using e-mail			
	1.5 Use an address book to manage contact information			
2 Manage use of e-mail software effectively	2.1 Develop and communicate guidelines and procedures for using e-mail effectively			
	2.2 Read and respond appropriately to e-mail messages and attachments			
	2.3 Use email software tools and techniques to automate responses			
	2.4 Explain why, how and when to archive messages			
	2.5 Organise, store and archive e-mail messages effectively			
	2.6 Customise e-mail software to make it easier to use			
	2.7 Explain how to minimise e-mail problems			
	2.8 Respond appropriately to email problems			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 75: Using Collaborative Technologies 1

Unit code:	**UCT1**
Unit reference number:	**UC96 04**
SCQF level:	**4**
SCQF credit value:	**3**

Unit summary

This unit is about the skills and knowledge needed to use IT tools and devices safely to work collaboratively by:

- preparing and accessing IT tools and devices, such as web or video conferencing, instant messaging/chat, online phone and video calls; online forums, social networking sites, wikis and other centralised depositories for documents, blogging, RSS and data feeds, bulk SMS or online work management tools

- playing a responsible and active role in real-time communication; and

- contributing relevant information.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Stay safe and secure when using collaborative technology	1.1 Follow guidelines for working with collaborative technology			
	1.2 Identify risks in using collaborative technology and why it is important to avoid them			
	1.3 Carry out straightforward checks on others' online identities and different types of information			
	1.4 Identify when and how to report online safety and security issues			
	1.5 Identify what methods are used to promote trust			
2 Set up and access IT tools and devices for collaborative working	2.1 Set up IT tools and devices that will enable you to contribute to collaborative work			
	2.2 Identify the purpose for using collaborative technologies and expected outcomes			
	2.3 Identify which collaborative technology tools and devices to use for different communication media			
	2.4 Identify what terms and conditions apply to using collaborative technologies			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Prepare collaborative technologies for use	3.1 Use given details to access collaborative technologies needed for a collaborative task			
	3.2 Adjust basic settings on collaborative technologies			
	3.3 Change the environment of collaborative technologies			
	3.4 Set up and use a data reader to feed information			
	3.5 Identify what and why permissions are set to allow others to access information			
4 Contribute to tasks using collaborative technologies	4.1 Contribute responsibly and actively to collaborative working			
	4.2 Contribute to producing and archiving the agreed outcome of collaborative working			
	4.3 Identify when there is a problem with collaborative technologies and where to get help			
	4.4 Respond to simple problems with collaborative technologies			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 76:   Using Collaborative Technologies 2

Unit code: **UCT2**

Unit reference number: **UC97 04**

SCQF level: **5**

SCQF credit value: **4**

Unit summary

This unit is about the skills and knowledge needed to facilitate the use of appropriate combinations of IT tools and devices for groups to work collaboratively by:

- planning and selecting the IT tools and devices to be used for work purposes and tasks, such as web or video conferencing, instant messaging/chat, online phone and video calls; online forums, social networking sites, wikis and other centralised depositories for documents, blogging, RSS and data feeds, bulk SMS or online work management tools

- preparing and setting up access to collaborative technologies

- presenting information and facilitating others contributions; and

- moderating the use of collaborative technologies.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Stay safe and secure when working with collaborative technology	1.1 Take appropriate steps to avoid risks when working with collaborative technology, in line with relevant guidelines			
	1.2 Explain what risks there may be in using collaborative technology and how to keep them to a minimum			
	1.3 Use appropriate methods to promote trust when working collaboratively			
	1.4 Carry out appropriate checks on others' online identities and different types of information			
	1.5 Identify and respond to inappropriate content and behaviour			
2 Plan and set up IT tools and devices for collaborative working	2.1 Describe the purposes for using collaborative technologies			
	2.2 Describe what outcomes are needed from collaborative working and whether or not archiving is required			
	2.3 Describe the roles, IT tools and facilities needed for collaborative tasks and communication media			
	2.4 Describe the features, benefits and limitations of different collaborative technology tools and devices			
	2.5 Describe the compatibility issues in different combinations of collaborative tools and devices			
	2.6 Select an appropriate combination of IT tools and devices to carry out collaborative tasks			
	2.7 Connect and configure the combination of IT tools and devices needed for a collaborative task			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Prepare collaborative technologies for use	3.1 Describe what access rights and issues others may have in using collaborative technologies			
	3.2 Assess what permissions are needed for different users and content			
	3.3 Set up and use access rights to enable others to access information			
	3.4 Set up and use permissions to filter information			
	3.5 Adjust settings so that others can access IT tools and devices for collaborative working			
	3.6 Select and use different elements to control environments for collaborative technologies			
	3.7 Select and join networks and data feeds to manage data to suit collaborative tasks			
4 Contribute to tasks using collaborative technologies	4.1 Describe rules of engagement for using collaborative technologies			
	4.2 Enable others to contribute responsibly to collaborative tasks			
	4.3 Present relevant and valuable information			
	4.4 Moderate the use of collaborative technologies			
	4.5 Archive the outcome of collaborative working			
	4.6 Assess when there is a problem with collaborative technologies and when to get expert help			
	4.7 Respond to problems with collaborative technologies			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 77: Using Collaborative Technologies 3

Unit code: UCT3

Unit reference number: UC98 04

SCQF level: 6

SCQF credit value: 6

Unit summary

This unit is about managing the safe use of multiple IT tools and devices to enable groups to work collaboratively and effectively by:

- setting and implementing guidelines for using collaborative technologies, such as web or video conferencing, instant messaging/chat, online phone and video calls; online forums, social networking sites, wikis and other centralised depositories for documents, blogging, RSS and data feeds, bulk SMS or online work management tools

- integrating IT tools and devices and creating environments to exploit their potential

- managing risks, permissions and data flow; and

- moderating and solving complex problems with the use of collaborative technologies.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Stay safe and secure when with collaborative technology	1.1 Explain what and why guidelines need to be established for working with collaborative technology			
	1.2 Develop and implement guidelines for good practice in working with collaborative technology			
	1.3 Explain how to establish an identity or present information that will promote trust			
	1.4 Develop and implement guidelines for checking the authenticity of identities and different types of information			
	1.5 Analyse and plan for the risks in the use of collaborative technologies for different tasks			
	1.6 Analyse and manage risks in the use of collaborative technologies			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Plan and set up IT tools and devices for collaborative working	2.1 Explain the features, benefits and limitations of different collaborative IT tools and devices for work purposes and tasks			
	2.2 Determine the IT tools and processes needed for archiving the outcomes of collaborative working			
	2.3 Summarise ways to integrate different collaborative technology tools and devices for a range of purposes, tasks and communication media			
	2.4 Explain potential access and compatibility issues with integrating different collaborative technology tools and devices			
	2.5 Select, connect and configure combinations that exploit the capabilities and potential of collaborative tools and devices			
	2.6 Resolve access and compatibility problems so that different collaborative tools and devices work successfully			
3 Prepare collaborative technologies for use	3.1 Evaluate data management principles, issues and methods			
	3.2 Manage levels of access and permissions for different purposes			
	3.3 Select and integrate different elements across applications to create environments for collaborative technologies			
	3.4 Set and adjust settings to facilitate use of collaborative technologies by others			
	3.5 Manage data flow to benefit collaborative working			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Manage tasks using collaborative technologies	4.1 Determine levels of responsibility for the use of collaborative technologies			
	4.2 Facilitate others' responsible contributions to and engagement with collaborative technologies			
	4.3 Manage the moderation of collaborative technologies			
	4.4 Oversee the archiving of the outcomes of collaborative working			
	4.5 Explain what problems can occur with collaborative technologies			
	4.6 Respond to problems with collaborative technologies and be prepared to help others to do so			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 78: Using Mobile IT Devices 1

Unit code: UMD1

Unit reference number: UC99 04

SCQF level: 4

SCQF credit value: 2

Unit summary

This unit is about the skills and knowledge needed to set up and use a mobile or handheld device securely. Learners will use these skills and knowledge to input and store data, and to transfer data to and from another device.

The use of mobile technologies will be defined as 'basic' because:

- the tools and functions on the mobile device will be pre-loaded and

- the techniques used for sharing files between devices will be familiar or commonly undertaken.

An activity will typically be 'straightforward or routine' because:

- the task or context using mobile technologies will be familiar and involve few factors (for example sending SMS messages to colleagues, maintaining a calendar of events, taking notes, capturing a photo, using Bluetooth connectivity to send a photo to a friend's mobile phone).

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Set up the mobile device to meet needs	1.1 Set up the mobile device for use			
	1.2 Use mobile device interface features effectively			
	1.3 Identify when and how to adjust device settings			
	1.4 Adjust device settings to meet needs			
	1.5 Identify any specific health and safety issues associated with the use of mobile devices			
	1.6 Follow guidelines and procedures for the use of mobile devices			
2 Use applications and files on the mobile device	2.1 Identify the different applications on the mobile device and what they can be used for			
	2.2 Select and use applications and files on the mobile device for an appropriate purpose			
	2.3 Input data accurately into a mobile device			
	2.4 Organise, store and retrieve data on a mobile device			
3 Transfer data to and from the mobile device	3.1 Identify different types of secure connection methods that can be used between devices			
	3.2 Transfer information to and from a mobile device			
	3.3 Recognise copyright and other constraints on the use and transfer of information			
	3.4 Identify why it is important to stay safe, keep information secure and to respect others when using a mobile device			
	3.5 Keep information secure when using a mobile device			

Learning outcomes	Assessment criteria		Evidence type	Portfolio reference	Date
4　Maintain the performance of the mobile device	4.1	Identify factors that can affect performance of the mobile device			
	4.2	Use appropriate techniques to maintain the performance of the mobile device			
	4.3	Identify common problems that occur with mobile devices and what causes them			
	4.4	Identify when to try to solve a problem and where to get expert advice			
	4.5	Use available resources to respond quickly and appropriately to common device problems			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 79: Using Mobile IT Devices 2

Unit code: UMD2

Unit reference number: UD01 04

SCQF level: 5

SCQF credit value: 2

Unit summary

This unit is about the skills and knowledge needed to make effective use of mobile or handheld devices and use intermediate tools and techniques. Learners will use these skills and knowledge to exchange information between devices. Any aspect that is unfamiliar may require support and advice from others.

The use of mobile technologies will be defined as 'intermediate' because:

- the tools and software used will be additional to the tools and software pre-loaded onto the device and at times the techniques for use will be non-routine or unfamiliar; and

- the techniques used for sharing information and files between devices will involve a number of steps and at times be non-routine or unfamiliar.

An activity will typically be 'non-routine or unfamiliar' because:

- the task or context using mobile technologies is likely to require several steps and some consideration and planning before undertaking the task.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Set up and customise the mobile device to meet needs	1.1	Describe the purpose of the different features and drawbacks of the mobile device			
		1.2	Describe different methods that can be used to access mobile networks			
		1.3	Prepare, set up and configure the mobile device for use			
		1.4	Select, use and customise interface features and settings to meet needs and improve efficiency			
		1.5	Describe any specific health and safety issues associated with the use of mobile devices			
		1.6	Apply guidelines and procedures for the use of mobile devices			
2	Select and use applications and files on the mobile device	2.1	Select and use applications and files on the mobile device for an appropriate purpose			
		2.2	Define file formats appropriate for mobile devices			
		2.3	Use software or tools to prepare or convert files to an appropriate format for mobile devices			
		2.4	Input data accurately into a mobile device			
		2.5	Organise, store and retrieve data efficiently on a mobile device			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Use tools and techniques to transfer data to and from mobile devices	3.1 Describe different types of secure connection methods that can be used between devices			
	3.2 Describe software requirements and techniques to connect and synchronise devices			
	3.3 Transfer information to and from mobile devices using secure connection procedures			
	3.4 Synchronise mobile device data with source data			
	3.5 Recognise copyright and other constraints on the use and transfer of information			
	3.6 Explain why it is important to stay safe, keep information secure and to respect others when using mobile devices			
	3.7 Keep information secure when using a mobile device			
4 Optimise the performance of mobile devices	4.1 Describe the factors that can affect performance of the mobile device and how to make improvements			
	4.2 Use appropriate techniques to optimise the performance of the mobile device			
	4.3 Describe problems that may occur with mobile devices and what causes them			
	4.4 Use an appropriate fault-finding procedure to identify and solve problems with the mobile device			
	4.5 Describe when to try to solve a problem and where to get expert advice			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 80: Personal Information Management Software 1

Unit code: PIM1

Unit reference number: UD02 04

SCQF level: 4

SCQF Credit value: 2

Unit summary

This unit is about the skills and knowledge needed to use a range of basic personal information management tools and techniques. Learners will use these tools and techniques to organise and plan their own time and tasks.

Software may also be termed personal planning software.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Use a calendar to schedule appointments	1.1 Create, edit and delete calendar entries			
	1.2 Arrange recurring appointments			
	1.3 Invite others to meetings and monitor attendance			
	1.4 Respond to meeting requests from others			
	1.5 Create reminders for calendar appointments			
	1.6 Organise and display appointments as required			
2 Use a task list to prioritise activities	2.1 Create, edit and delete task information			
	2.2 Organise and display tasks, setting targets for completion			
	2.3 Monitor task progress and set reminders			
	2.4 Report on task status and activity			
3 Use an address book to store, organise and retrieve contact information	3.1 Create, edit and delete contact information			
	3.2 Organise and display contact information			
	3.3 Set up a distribution list			
	3.4 Describe why it is important to use personal data responsibly and safely			
	3.5 Outline why and how to keep contact information up to date			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 81: Personal Information Management Software 2

Unit code: PIM2

Unit reference number: UD03 04

SCQF level: 5

SCQF credit value: 2

Unit summary

This unit is about the skills and knowledge needed to use a range of personal information management tools and techniques. Learners will use these skills and knowledge to organise and prioritise their own time and to manage multiple tasks and calendars.

Software may also be termed personal planning software.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Use calendars to schedule appointments and meetings	1.1 Create, edit and delete multiple calendar entries			
	1.2 Arrange recurring appointments			
	1.3 Invite others to meetings and monitor attendance			
	1.4 Respond to meeting requests from others			
	1.5 Create reminders for calendar appointments and events			
	1.6 Locate, organise and display appointments and events as required			
	1.7 Import and export calendar data			
	1.8 Describe how to share calendars with other users			
2 Use a task list to prioritise activities	2.1 Create, edit and delete task information			
	2.2 Organise and display tasks, setting targets for completion			
	2.3 Monitor task progress and set reminders			
	2.4 Report on task status and activity			
	2.5 Use software features to work collaboratively on tasks with other users			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Use an address book to store, organise and retrieve contact information	3.1 Create, update and delete contact information			
	3.2 Locate, organise and display contact information efficiently			
	3.3 Create additional contact lists to separate work and leisure contacts			
	3.4 Select and export contact details for use in other applications			
	3.5 Create and modify a distribution list			
	3.6 Share contact information with others responsibly			
	3.7 Explain why it is important to use personal data responsibly and safely			
	3.8 Describe why and how to keep contact information up to date			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 82: IT Software Fundamentals 1

Unit code:	**ISF:FS1**
Unit reference number:	**UD04 04**
SCQF level:	**4**
SCQF credit value:	**3**

Unit summary

This unit is about the skills and knowledge needed to use appropriate predefined or commonly used IT tools. Learners will use these tools to develop and produce information for tasks and activities that are straightforward or routine. Any aspect that is unfamiliar will require support and advice from other people.

An activity will typically be 'straightforward or routine' because:

- the task or context need will be familiar and involve few factors (for example time available, audience needs, message, structure)
- the input and output of information will be predetermined by the person supervising the task; and
- the techniques used will be familiar or commonly undertaken.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Select and use software applications to meet needs and solve problems	1.1	Identify different software applications and give examples of their use			
		1.2	Select and use appropriate software applications to develop, produce and present different types of information to meet needs and solve problems			
		1.3	Identify what types of information are needed			
2	Enter, develop and format different types of information to suit its meaning and purpose	2.1	Enter, organise and format different types of information to meet needs			
		2.2	Apply editing techniques to refine information as required			
		2.3	Combine information of different forms or from different sources to meet needs			
		2.4	Select and use appropriate page layout to present information effectively			
3	Present information in ways that are fit for purpose and audience	3.1	Work accurately and proof-read, using software facilities where appropriate for the task			
		3.2	Produce information that is fit for purpose and audience using commonly accepted layouts as appropriate			
4	Make effective use of IT tools and facilities to present information	4.1	Review and modify work as it progresses to ensure the result is fit for purpose and audience			
		4.2	Review the effectiveness of the IT tools selected to meet presentation needs			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 83: IT Software Fundamentals 2

Unit code: ISF:FS2

Unit reference number: UD05 04

SCQF level: 5

SCQF credit value: 3

Unit summary

This unit is about the skills and knowledge to select and use IT tools to develop and produce information independently for activities that are at times non-routine or unfamiliar. Any aspect that is unfamiliar will require support and advice from other people.

An activity will typically be 'non-routine or unfamiliar' because:

- the task or context is likely to require some analysis, clarification or research (to separate the components and to identify what factors need to be considered, for example, time available, audience needs, accessibility of source, types of content, message and meaning) before an approach can be planned

- the user will take some responsibility for developing the input or output of information; and

- the techniques required will involve a number of steps and at times be non-routine or unfamiliar.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Select and use appropriate software applications to meet needs and solve problems	1.1 Describe what types of information are needed			
	1.2 Select and use software applications to develop, produce and present different types of information to meet needs and solve problems			
2 Enter, develop, combine and format different types of information to suit its meaning and purpose	2.1 Enter, organise, refine and format different types of information, applying editing techniques to meet needs			
	2.2 Use appropriate techniques to combine image and text components			
	2.3 Combine information of different forms or from different sources			
	2.4 Select and use appropriate page layout to present information effectively			
3 Present information in ways that are fit for purpose and audience	3.1 Work accurately and proof-read, using software facilities where appropriate			
	3.2 Identify inconsistencies or quality issues with the presentation of information			
	3.3 Produce information that is fit for purpose and audience using accepted layouts and conventions as appropriate			
4 Evaluate the selection and use of IT tools and facilities to present information	4.1 Review and modify work as it progresses to ensure the result is fit for purpose and audience and to inform future judgements			
	4.2 Review the effectiveness of the IT tools selected to meet needs in order to improve future work			

Learner name: _____   Date:_____

Learner signature: _____   Date:_____

Assessor signature: _____   Date:_____

Internal verifier signature: _____   Date:_____
(*if sampled*)

Unit 84:   Audio Software 1

Unit code: AV1

Unit reference number: UD06 04

SCQF level: 4

SCQF credit value: 2

Unit summary

This unit is about the skills and knowledge needed by an IT user to use a range of basic audio software tools and techniques appropriately. Learners will use these tools and techniques to record and edit straightforward or routine audio sequences. Any aspect that is unfamiliar will require support and advice from others.

Audio software tools and techniques will be defined as 'basic' because:

- the software tools and functions involved will be pre-defined or commonly used

- the range of inputting, manipulation and outputting techniques are straightforward or routine; and

- the file type and structure will be predetermined or familiar.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Use audio hardware and software to capture sequences	1.1 Identify the input device and associated software to use			
	1.2 Use input devices and built-in audio software to record information to meet needs			
	1.3 Identify the file format used by the input device			
	1.4 Store and retrieve sequences using pre-set file formats, in line with local guidelines and conventions where available			
2 Use audio software tools to combine and edit sequences	2.1 Identify the audio editing software to use for the file format			
	2.2 Cut and paste short sequences to meet needs			
	2.3 Combine information of different forms or from different sources, in line with any copyright constraints			
	2.4 Identify copyright constraints on using others' information			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Play and present audio sequences	3.1 Identify appropriate playback software to use for the sequence			
	3.2 Identify the display device to use for the sequence			
	3.3 Select and use appropriate combination of software and display device to playback audio sequences			
	3.4 Adjust playback and display settings so that sequences are presented to meet needs			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 85: Audio Software 2

Unit code: AV2

Unit reference number: UD07 04

SCQF level: 5

SCQF credit value: 3

Unit summary

This unit is about the skills and knowledge needed by an IT user to select and use a wide range of intermediate audio software tools and techniques. Learners will use these tools and techniques to record and edit audio sequences that are at times non-routine or unfamiliar. Any aspect that is unfamiliar may require support and advice from others.

Audio software tools and techniques will be defined as 'basic' because:

- the software tools and functions involved will at times be non-routine or unfamiliar

- the choice and use of input, manipulation and output techniques will need to take account of a number of factors or elements and at times be multi-step

- the user will take some responsibility for inputting, manipulating and outputting the information.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Use audio hardware and software to capture sequences	1.1 Identify the combination of input device and audio software to use to capture information, to avoid any compatibility issues			
	1.2 Select and use an appropriate combination of input device and audio software to record sequences			
	1.3 Describe the impact file size and file format will have on saving sequences			
	1.4 Identify when to use different types of information coding and compression			
	1.5 Store and retrieve sequences using appropriate file formats and compression, in line with local guidelines and conventions where available			
2 Use audio software tools and techniques to combine and edit sequences	2.1 Identify the sequences to add, keep and remove			
	2.2 Select and use appropriate audio software tools to mark-up and edit sequences			
	2.3 Organise and combine information for sequences in line with any copyright constraints, including across different software			
	2.4 Describe how copyright constraints affect use of own and others' information			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Play and present audio sequences	3.1 Describe the features and constraints of playback software and display devices			
	3.2 Select and use an appropriate combination of audio playback software and display device to suit the file format			
	3.3 Identify the settings which could be adjusted to improve the quality of presentations			
	3.4 Adjust playback and display settings to enhance the quality of the presentation			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 86: Audio Software 3

Unit code: AV3

Unit reference number: UD08 04

SCQF level: 6

SCQF credit value: 4

Unit summary

This unit is about the skills and knowledge needed by an IT user to select and use a range of advanced audio software tools and techniques. They will use these to record and edit complex or non-routine audio sequences.

Audio software tools and techniques will be defined as 'advanced' because:

- the software tools and functions used will be complex, and at times involve having the idea that there may be a tool or function to do something (for example improve efficiency or create an effect), exploring technical support, self-teaching and applying

- the inputting, manipulating and outputting techniques will be complex, and will involve research, identification and application; and

- the user will take full responsibility for inputting, manipulating and outputting the information.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Use audio hardware and software to capture sequences	1.1 Determine the content needed for sequences, and when to originate it			
	1.2 Explain any compatibility issues between combinations of input device and audio software			
	1.3 Select and use an appropriate combination of input device and audio software to optimise the recording of information			
	1.4 Select and use an appropriate combination of hardware and software to originate and develop new content for sequences			
	1.5 Analyse and explain the impact file size and file format will have, including when to use information coding and compression			
	1.6 Store and retrieve sequences using appropriate file formats and compression, in line with local guidelines and conventions where available			
2 Use audio software tools and techniques to edit sequences	2.1 Select and use appropriate audio software tools and techniques to mark-up and edit sequences to achieve required effects			
	2.2 Provide guidance on how copyright constraints affect use of own and others' information			
	2.3 Organise, combine and link information for sequences in line with any copyright constraints, including across different software			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Play and present audio sequences	3.1 Explain the features and constraints of playback software and devices as appropriate for different purposes			
	3.2 Select and use an appropriate combination of audio playback software and devices to suit the file format			
	3.3 Present sequences effectively by exploiting the features and settings of the playback software and devices to maximise quality and meet needs			
	3.4 Evaluate the quality of sequences and explain how to respond to quality issues and problems			

Learner name: _____ Date:_____

Learner signature: _____ Date:_____

Assessor signature: _____ Date:_____

Internal verifier signature: _____ Date:_____
(*if sampled*)

Unit 87: Video Software 1

Unit code: AV1

Unit reference number: UD09 04

SCQF level: 4

SCQF credit value: 2

Unit summary

This unit is about the skills and knowledge required by an IT user to use a range of basic video software tools and techniques appropriately to record and edit straightforward or routine video sequences. Any aspect that is unfamiliar will require support and advice from others.

Video software tools and techniques will be defined as 'basic' because:

- the software tools and functions involved will be predefined or commonly used

- the range of inputting, manipulation and outputting techniques are straightforward or routine; and

- the file type and structure will be predetermined or familiar.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Use video hardware and software to capture sequences	1.1	Identify the input device and associated software to use			
		1.2	Use input devices and built-in video software to record information to meet needs			
		1.3	Identify the file format used by the input device			
		1.4	Store and retrieve sequences using pre-set file formats, in line with local guidelines and conventions where available			
2	Use video software tools to combine and edit sequences	2.1	Identify the video editing software to use for the file format			
		2.2	Cut and paste short sequences to meet needs			
		2.3	Combine information of different forms or from different sources, in line with any copyright constraints			
		2.4	Identify copyright constraints on using others' information			
3	Play and present video sequences	3.1	Identify appropriate playback software to use for the sequence			
		3.2	Identify the display device to use for the sequence			
		3.3	Select and use appropriate combination of software and display device to playback video sequences			
		3.4	Adjust playback and display settings so that sequences are presented to meet needs			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 88: Video Software 2

Unit code: AV2

Unit reference number: UD10 04

SCQF level: 5

SCQF credit value: 3

Unit summary

This unit is about the skills and knowledge needed by an IT user to select and use a wide range of intermediate video software tools and techniques to record and edit video sequences that are at times non-routine or unfamiliar. Any aspect that is unfamiliar may require support and advice from others.

Video software tools and techniques will be defined as 'intermediate' because:

- the software tools and functions involved will at times be non-routine or unfamiliar

- the choice and use of input, manipulation and output techniques will need to take account of a number of factors or elements and at times be multi-step

- the user will take some responsibility for inputting, manipulating and outputting the information.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Use video hardware and software to capture sequences	1.1 Identify the combination of input device and video software to use to capture information, to avoid any compatibility issues			
	1.2 Select and use an appropriate combination of input device and video software to record sequences			
	1.3 Describe the impact file size and file format will have on saving sequences			
	1.4 Identify when to use different types of information coding and compression			
	1.5 Store and retrieve sequences using appropriate file formats and compression, in line with local guidelines and conventions where available			
2 Use video software tools and techniques to combine and edit sequences	2.1 Identify the sequences to add, keep and remove			
	2.2 Select and use appropriate video software tools to mark-up and edit sequences			
	2.3 Organise and combine information for sequences in line with any copyright constraints, including across different software			
	2.4 Describe how copyright constraints affect use of own and others' information			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Play and present video sequences	3.1 Describe the features and constraints of playback software and display devices			
	3.2 Select and use an appropriate combination of video playback software and display device to suit the file format			
	3.3 Identify the settings which could be adjusted to improve the quality of presentations			
	3.4 Adjust playback and display settings to enhance the quality of the presentation			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 89: Video Software 3

Unit code: AV3

Unit reference number: UD11 04

SCQF level: 6

SCQF credit value: 4

Unit summary

This unit is about the skills and knowledge needed by an IT user to select and use a range of advanced video software tools and techniques to record and edit complex or non-routine video sequences.

Video software tools and techniques will be defined as 'advanced' because:

- the software tools and functions used will be complex, and at times involve having the idea that there may be a tool or function to do something (for example improve efficiency or create an effect), exploring technical support, self-teaching and applying

- the inputting, manipulating and outputting techniques will be complex, and will involve research, identification and application; and

- the user will take full responsibility for inputting, manipulating and outputting the information.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Use video hardware and software to capture sequences	1.1 Determine the content needed for sequences, and when to originate it			
	1.2 Explain any compatibility issues between combinations of input device and video software			
	1.3 Select and use an appropriate combination of input device and video software to optimise the recording of information			
	1.4 Select and use an appropriate combination of hardware and software to originate and develop new content for sequences			
	1.5 Analyse and explain the impact file size and file format will have, including when to use information coding and compression			
	1.6 Store and retrieve sequences using appropriate file formats and compression, in line with local guidelines and conventions where available			
2 Use video software tools and techniques to edit sequences	2.1 Select and use appropriate video software tools and techniques to mark-up and edit sequences to achieve required effects			
	2.2 Provide guidance on how copyright constraints affect use of own and others' information			
	2.3 Organise, combine and link information for sequences in line with any copyright constraints, including across different software			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Play and present video sequences	3.1 Explain the features and constraints of playback software and display devices as appropriate for different purposes			
	3.2 Select and use an appropriate combination of video playback software and display device to suit the file format			
	3.3 Present sequences effectively by exploiting the features and settings of the playback software and display device to maximise quality and meet needs			
	3.4 Evaluate the quality of sequences and explain how to respond to quality issues and problems			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 90: Database Software 1

Unit code: DB1

Unit reference number: UD12 04

SCQF level: 4

SCQF credit value: 3

Unit summary

This unit is about the skills and knowledge required by an IT user to use database software tools and techniques to:

- enter straightforward or routine information into a database
- set up a single table in a flat file database
- retrieve information by running routine queries; and
- produce reports using predefined menus or short cuts.

The structure and functionality of the database will be predefined. Any aspects that are unfamiliar will require support and advice from others.

Database tools and techniques will be described as 'basic' because:

- the tools and functions will be predefined or commonly used; and
- the techniques for inputting, manipulation and outputting will be straightforward or routine.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Enter, edit and organise structured information in a database	1.1 Identify the main components of a database			
	1.2 Create a database table for a purpose using specified fields			
	1.3 Enter structured data into records to meet requirements			
	1.4 Locate and amend data records			
	1.5 Respond appropriately to data entry error messages			
	1.6 Check data meets needs, using IT tools and making corrections as necessary			
2 Use database software tools to extract information and produce reports	2.1 Identify queries which meet information requirements			
	2.2 Run simple database queries			
	2.3 Identify reports which meet information requirements			
	2.4 Generate and print pre-defined database reports			

Learner name: _____   Date:_____

Learner signature: _____   Date:_____

Assessor signature: _____   Date:_____

Internal verifier signature: _____   Date:_____
(*if sampled*)

Unit 91: Database Software 2

Unit code: DB2

Unit reference number: UD13 04

SCQF level: 5

SCQF credit value: 4

Unit summary

This unit is about the skills and knowledge required by an IT user to select and use intermediate database software tools and techniques to:

- enter information into databases, that is at times non-routine or unfamiliar

- retrieve information by creating queries using multiple selection criteria; and

- produce reports by setting up menus or short cuts.

They will also be able to create and modify single table, non-relational databases. Any aspects that are unfamiliar may require support and advice from others.

Database tools, functions and techniques will be described as 'intermediate' because:

- the software tools and functions involved will at times be non-routine or unfamiliar; and

- the choice and use of input, manipulation and output techniques will need to take account of a number of factors or elements.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Create and modify non-relational database tables	1.1 Identify the components of a database design			
	1.2 Describe the field characteristics for the data required			
	1.3 Create and modify database tables using a range of field types			
	1.4 Describe ways to maintain data integrity			
	1.5 Respond appropriately to problems with database tables			
	1.6 Use database tools and techniques to ensure data integrity is maintained			
2 Enter, edit and organise structured information in a database	2.1 Create forms to enter, edit and organise data in a database			
	2.2 Select and use appropriate tools and techniques to format data entry forms			
	2.3 Check data entry meets needs, using IT tools and making corrections as necessary			
	2.4 Respond appropriately to data entry errors			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Use database software tools to run queries and produce reports	3.1 Create and run database queries using multiple criteria to display or amend selected data			
	3.2 Plan and produce database reports from a single table non-relational database			
	3.3 Select and use appropriate tools and techniques to format database reports			
	3.4 Check reports meet needs, using IT tools and making corrections as necessary			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 92: Database Software 3

Unit code: DB3

Unit reference number: UD14 04

SCQF level: 6

SCQF credit value: 6

Unit summary

This unit is about the skills and knowledge required by an IT user to select and use advanced database software tools and techniques efficiently to:

- enter complex information into databases

- retrieve information by creating queries using multiple selection criteria; and

- produce reports by setting up menus or short cuts.

They will also be able to design, create and interrogate multiple-table relational databases.

Database tools, functions and techniques will be described as 'advanced' because:

- the software tools and functions involved will be complex and at times require new learning, which will involve having the idea that there may be a tool or function to do something (for example improve efficiency or create an effect), exploring technical support, self-teaching and applying; and

- the input, manipulation and output techniques involved will be complex, which will involve research, identification and application.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Plan, create and modify relational database tables to meet requirements	1.1 Explain how a relational database design enables data to be organised and queried			
	1.2 Plan and create multiple tables for data entry with appropriate fields and properties			
	1.3 Set up and modify relationships between database tables			
	1.4 Explain why and how to maintain data integrity			
	1.5 Respond appropriately to problems with database tables			
	1.6 Use database tools and techniques to ensure data integrity is maintained			
2 Enter, edit and organise structured information in a database	2.1 Design and create forms to access, enter, edit and organise data in a database			
	2.2 Select and use appropriate tools and techniques to format data entry forms			
	2.3 Check data entry meets needs, using IT tools and making corrections as necessary			
	2.4 Respond appropriately to data entry errors			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Use database software tools to create, edit and run data queries and produce reports	3.1 Explain how to select, generate and output information from queries according to requirements			
	3.2 Create and run database queries to display, amend or calculate selected data			
	3.3 Plan and produce database reports from a multiple-table relational database			
	3.4 Select and use appropriate tools and techniques to format database reports			
	3.5 Check reports meet needs, using IT tools and making corrections as necessary			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 93:   Design Software 1

Unit code: DS1

Unit reference number: UD15 04

SCQF level: 4

SCQF credit value: 3

Unit summary

This unit is about the skills and knowledge required by an IT user to use basic design software tools and techniques appropriately to create straightforward or routine designs. Any aspect that is unfamiliar will require support and advice from others.

Design software tools and techniques will be defined as 'basic' because:

- the range of inputting, manipulation and outputting techniques will be straightforward or routine

- the software tools and functions involved will be predefined or commonly used

- the type and structure of the task will be predetermined or familiar.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Obtain, insert and combine information for designs	1.1 Identify what designs are needed			
	1.2 Obtain, input and prepare designs to meet needs			
	1.3 Identify what generic copyright and other constraints apply to the use of designs			
	1.4 Combine information of different types or from different sources for designs			
	1.5 Identify the context in which the designs will be used			
	1.6 Identify which file format to use for saving and exchanging designs			
	1.7 Store and retrieve files effectively, in line with local guidelines and conventions where available			
2 Use design software tools to create, manipulate and edit designs	2.1 Use suitable tools and techniques to create designs			
	2.2 Use appropriate tools and techniques to manipulate and edit designs			
	2.3 Check designs meet needs, using IT tools and making corrections as necessary			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 94: Design Software 2

Unit code: DS2

Unit reference number: UD16 04

SCQF level: 5

SCQF credit value: 4

Unit summary

This unit is about the skills and knowledge required by an IT user to select and use a range of intermediate design software tools and techniques to create non-routine or unfamiliar designs. Any aspect that is unfamiliar may require support and advice from others.

Design software tools and techniques at this level are described as 'intermediate' because:

- the range of entry, manipulation and outputting techniques will be at times non-routine or unfamiliar

- the software tools and functions involved will at times be non-routine or unfamiliar; and

- the user will take some responsibility for setting up or developing the type or structure of the document.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Obtain, insert and combine information for designs	1.1 Describe what designs are needed			
	1.2 Obtain, input and prepare designs to meet needs			
	1.3 Describe what copyright and other constraints apply to the use of designs			
	1.4 Use appropriate techniques to organise and combine information of different types or from different sources			
	1.5 Describe the context in which the designs will be used			
	1.6 Describe what file format to use for saving designs to suit different presentation methods			
	1.7 Store and retrieve files effectively, in line with local guidelines and conventions where available			
2 Use design software tools to create, manipulate and edit designs	2.1 Identify what technical factors affecting designs need to be taken into account and how to do so			
	2.2 Select and use suitable techniques to create designs			
	2.3 Use guide lines and dimensioning tools appropriately to enhance precision			
	2.4 Select and use appropriate tools and techniques to manipulate and edit for designs			
	2.5 Check designs meet needs, using IT tools and making corrections as necessary			
	2.6 Identify and respond to quality problems with designs to make sure that they meet needs			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 95: Design Software 3

Unit code: DS3

Unit reference number: UD17 04

SCQF level: 6

SCQF credit value: 5

Unit summary

This unit is about the skills and knowledge required by an IT user to select and use a wide range of advanced design software tools and techniques to create complex and non-routine designs.

Design software tools and techniques will be described as 'advanced' because:

- the software tools and functions used will be complex and at times require new learning, which will involve having the idea that there may be a tool or function to do something (for example improve efficiency or create an effect), exploring technical support, self-teaching and applying

- the inputting, manipulating and outputting techniques will be multi-step and complex, and will involve research, identification and application; and

- the user will take full responsibility for inputting, structuring, editing and presenting the information.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Obtain, insert and combine information for designs	1.1 Explain what designs are needed			
	1.2 Explain how the context affects the way designs should be prepared			
	1.3 Provide guidance on what and how any copyright or other constraints may apply to the use of own and others' designs			
	1.4 Obtain, insert and prepare designs			
	1.5 Explain how file format affects design quality, format and size and how to choose appropriate formats for saving designs			
	1.6 Use appropriate techniques to organise and combine information of different types or from different sources			
	1.7 Store and retrieve files effectively, in line with guidelines and conventions where available			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Use design software tools to create, manipulate and edit designs	2.1 Explain what technical factors affecting designs needs to be taken into account and how to do so			
	2.2 Select and use suitable tools and techniques efficiently to create designs			
	2.3 Use guide lines and dimensioning tools appropriately to enhance precision			
	2.4 Select and use appropriate tools and techniques to manipulate and edit designs			
	2.5 Check designs meet needs, using IT tools and making corrections as necessary			
	2.6 Identify and respond appropriately to quality problems to ensure that outcomes are fit for purpose and meet needs			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 96: Imaging Software 1

Unit code: IS1

Unit reference number: UD18 04

SCQF level: 4

SCQF credit value: 3

Unit summary

This unit is about the skills and knowledge required by an IT user to use basic imaging software tools and techniques appropriately to produce straightforward or routine images. Any aspect that is unfamiliar will require support and advice from others.

Imaging software tools and techniques will be described as 'basic' because:

- the range of inputting, manipulation and outputting techniques will be straightforward or routine

- the software tools and functions involved will be predefined or commonly used

- the type and structure of the task will be predetermined or familiar.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Obtain, insert and combine information for images	1.1 Identify what images are needed			
	1.2 Obtain, input and prepare images to meet needs			
	1.3 Identify what generic copyright and other constraints apply to the use of images			
	1.4 Combine information of different types or from different sources for images			
	1.5 Identify the context in which the images will be used			
	1.6 Identify which file format to use for saving and exchanging images			
	1.7 Store and retrieve files effectively, in line with local guidelines and conventions where available			
2 Use imaging software tools to create, manipulate and edit images	2.1 Use suitable tools and techniques to create images			
	2.2 Use appropriate tools and techniques to manipulate and edit images			
	2.3 Check images meet needs, using IT tools and making corrections as necessary			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 97:   Imaging Software 2

Unit code: **IS2**

Unit reference number: **UD19 04**

SCQF level: **5**

SCQF credit value: **4**

Unit summary

This unit is about the skills and knowledge required by an IT user to select and use a range of intermediate imaging software tools and techniques to produce at times non-routine or unfamiliar images. Any aspect that is unfamiliar may require support and advice from others.

Imaging software tools and techniques at this level are described as 'intermediate' because:

- the range of entry, manipulation and outputting techniques will be at times non-routine or unfamiliar

- the software tools and functions involved will at times be non-routine or unfamiliar; and

- the user will take some responsibility for setting up or developing the type or structure.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Obtain, insert and combine information for images	1.1 Describe what images are needed			
	1.2 Obtain, input and prepare images to meet needs			
	1.3 Describe what copyright and other constraints apply to the use of images			
	1.4 Use appropriate techniques to organise and combine information of different types or from different sources			
	1.5 Describe the context in which the images will be used			
	1.6 Describe what file format to use for saving images to suit different presentation methods			
	1.7 Store and retrieve files effectively, in line with local guidelines and conventions where available			
2 Use imaging software tools to create, manipulate and edit images	2.1 Identify what technical factors affecting images need to be taken into account and how to do so			
	2.2 Select and use suitable techniques to create images			
	2.3 Use guide lines and dimensioning tools appropriately to enhance precision			
	2.4 Select and use appropriate tools and techniques to manipulate and edit images			
	2.5 Check images meet needs, using IT tools and making corrections as necessary			
	2.6 Identify and respond to quality problems with images to make sure that they meet needs			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 98:   Imaging Software 3

Unit code: IS3

Unit reference number: UD20 04

SCQF level: 6

SCQF credit value: 5

Unit summary

This unit is about the skills and knowledge required by an IT user to select and use a wide range of advanced imaging software tools and techniques to create complex and non-routine images.

Imaging software tools and techniques will be described as 'advanced' because:

- the software tools and functions used will be complex and at times require new learning, which will involve having the idea that there may be a tool or function to do something (for example improve efficiency or create an effect), exploring technical support, self-teaching and applying

- the inputting, manipulating and outputting techniques will be multi-step and complex, and will involve research, identification and application; and

- the user will take full responsibility for inputting, structuring, editing and presenting the information.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Obtain, insert and combine information for images	1.1 Explain what images are needed			
	1.2 Explain how the context affects the way images should be prepared			
	1.3 Provide guidance on what and how any copyright or other constraints may apply to the use of own and others' images			
	1.4 Obtain, insert and prepare images			
	1.5 Explain how file format affects image quality, format and size and how to choose appropriate formats for savings images			
	1.6 Use appropriate techniques to organise and combine information of different types or from different sources			
	1.7 Store and retrieve files effectively, in line with guidelines and conventions where available			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Use imaging software tools to create, manipulate and edit images	2.1 Explain what technical factors affecting images need to be taken into account and how to do so			
	2.2 Select and use suitable tools and techniques efficiently to create images			
	2.3 Use guide lines and dimensioning tools appropriately to enhance precision			
	2.4 Select and use appropriate tools and techniques to manipulate and edit images			
	2.5 Check images meet needs, using IT tools and making corrections as necessary			
	2.6 Identify and respond appropriately to quality problems to ensure that images are fit for purpose and meet needs			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 99: Desktop Publishing Software 1

Unit code:	**DTP1**
Unit reference number:	**UD21 04**
SCQF level:	**4**
SCQF credit value:	**3**

Unit summary

This unit is about the skills and knowledge required by an IT user to use a range of basic desktop publishing software tools and techniques to produce straightforward or routine publications. Any aspect that is unfamiliar will require support and advice from others.

Publication tools and techniques will be described as 'basic' because:

- the software tools and functions will be predefined or commonly used

- the range of entry, manipulation and outputting techniques will be straightforward or routine; and

- the inputting, manipulating and outputting of the information will be predetermined, straightforward or routine.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Select and use appropriate designs and page layouts for publications	1.1 Identify what types of information are needed			
	1.2 Identify what page design and layout will be required			
	1.3 Select and use an appropriate page design and layout for publications in line with local guidelines, where relevant			
	1.4 Select and use appropriate media for the publication			
2 Input and combine text and other information within publications	2.1 Input information into publications so that it is ready for editing and formatting			
	2.2 Identify copyright constraints on using others' information			
	2.3 Organise and combine information of different types or from different sources in line with any copyright constraints			
	2.4 Store and retrieve publication files effectively, in line with local guidelines and conventions where available			
3 Use desktop publishing software techniques to edit and format publications	3.1 Identify what editing and formatting to use for the publication			
	3.2 Select and use appropriate techniques to edit publications and format text			
	3.3 Manipulate images and graphic elements accurately			
	3.4 Control text flow within single and multiple columns and pages			
	3.5 Check publications meet needs, using IT tools and making corrections as necessary			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 100: Desktop Publishing Software 2

Unit code:	**DTP2**
Unit reference number:	**UD22 04**
SCQF level:	**5**
SCQF credit value:	**4**

Unit summary

This unit is about the skills and knowledge required by an IT user to select and use a wide range of intermediate desktop publishing software tools and techniques effectively. They will use these to produce publications that are at times non-routine or unfamiliar. Any aspect that is unfamiliar may require support and advice from others.

Publication tools and techniques will be described as 'intermediate' because:

- the software tools and functions used will be at times non-routine or unfamiliar

- the choice and use of input, manipulation and output techniques will need to take account of a number of factors or elements; and

- the user will take some responsibility for inputting, structuring, editing and presenting the information, which at times may be non-routine or unfamiliar.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Select and use appropriate designs and page layouts for publications	1.1 Describe what types of information are needed			
	1.2 Describe how to change page design and layout to increase effectiveness of a publication			
	1.3 Select, change and use an appropriate page design and layout for publications in line with local guidelines, where relevant			
	1.4 Select and use appropriate media for the publication			
2 Input and combine text and other information within publications	2.1 Find and input information into a publication so that it is ready for editing and formatting			
	2.2 Organise and combine information for publications in line with any copyright constraints, including importing information produced using other software			
	2.3 Describe how copyright constraints affect use of own and others' information			
	2.4 Describe which file format to use for saving designs and images			
	2.5 Store and retrieve publication files effectively, in line with local guidelines and conventions where available			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Use desktop publishing software techniques to edit and format publications	3.1 Identify what editing and formatting to use for the publication			
	3.2 Select and use appropriate techniques to edit publications and format text			
	3.3 Manipulate images and graphic elements accurately			
	3.4 Control text flow within single and multiple columns and pages			
	3.5 Check publications meet needs, using IT tools and making corrections as necessary			
	3.6 Identify and respond to quality problems with publications to make sure they meet needs			

Learner name: _____ Date:_____

Learner signature: _____ Date:_____

Assessor signature: _____ Date:_____

Internal verifier signature: _____ Date:_____
(*if sampled*)

Unit 101: Desktop Publishing Software 3

Unit code: DTP3

Unit reference number: UD23 04

SCQF level: 6

SCQF credit value: 5

Unit summary

This unit is about the skills and knowledge required by an IT user to select and use a wide range of advanced desktop publishing software tools and techniques effectively. They will use these to produce publications that are at times non-routine or unfamiliar.

Publication tools and techniques will be described as 'advanced' because:

- the software tools and functions used will be complex and at times require new learning, which will involve having the idea that there may be a tool or function to do something (for example improve efficiency or create an effect), exploring technical support, self-teaching and applying

- the inputting, manipulating and outputting techniques will be complex, and will involve research, identification and application; and

- the user will take full responsibility for inputting, structuring, editing and presenting the information.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Select and use appropriate designs and page layouts for publications	1.1 Explain what types of information are needed			
	1.2 Explain when and how to change page design and layout to increase effectiveness of a publication			
	1.3 Select, change, define, create and use appropriate page design and layout for publications in line with local guidelines, where relevant			
	1.4 Select and use appropriate media for the publication			
2 Input and combine text and other information within publications	2.1 Find and input information into a publication so that it is ready for editing and formatting			
	2.2 Organise and combine information for publications in line with any copyright constraints, including importing information produced using other software			
	2.3 Provide guidance on how copyright constraints affect use of own and others' information			
	2.4 Explain which file format to use for saving designs and images			
	2.5 Store and retrieve publication files effectively, in line with local guidelines and conventions where available			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Use desktop publishing software techniques to edit and format publications	3.1 Determine and discuss what styles, colours, font schemes, editing and formatting to use for the publication			
	3.2 Create styles, colours and font schemes to meet needs			
	3.3 Select and use appropriate techniques to edit publications and format text			
	3.4 Manipulate images and graphic elements accurately			
	3.5 Control text flow within single and multiple columns and pages			
	3.6 Check publications meet needs, using IT tools and making corrections as necessary			
	3.7 Identify and respond appropriately to quality problems with publications to ensure that outcomes are fit for purpose and meet needs			

Learner name: _____   Date:_____

Learner signature: _____   Date:_____

Assessor signature: _____   Date:_____

Internal verifier signature: _____   Date:_____
(*if sampled*)

Unit 102: Drawing and Planning Software 1

Unit code: **DPS1**

Unit reference number: **UD24 04**

SCQF level: **4**

SCQF credit value: **2**

Unit summary

This unit is about the skills and knowledge required by an IT user to select and use basic tools and techniques. Learners will use these tools and techniques to produce straightforward or routine drawings and plans. Any aspects that are unfamiliar will require support and advice.

2D drawing and planning software tools and techniques will described as 'basic' because:

- the software tools and functions will be predefined or commonly used

- the range of entry, manipulation and outputting techniques will be straightforward or routine; and

- the inputting, manipulating and outputting of the information will be predetermined, straightforward or routine.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Input, organise and combine information for drawings or plans	1.1 Identify what types of 2D shapes and other elements will be needed			
	1.2 Identify which template or blank document to use			
	1.3 Select the appropriate shapes, from those available, to meet needs			
	1.4 Input the relevant shapes and other elements into existing templates or blank documents so that they are ready for editing and formatting			
	1.5 Identify what copyright constraints apply to the use of shapes or other elements			
	1.6 Combine information of different types or from different sources for drawings and plans			
	1.7 Store and retrieve drawing files effectively, in line with local guidelines and conventions where available			
2 Use tools and techniques to edit, manipulate, format and present drawings or plans	2.1 Identify what drafting guides to use so that the shapes and other elements are appropriately prepared			
	2.2 Use appropriate software tools to manipulate and edit shapes and other elements			
	2.3 Select and use appropriate software tools to format shapes and other elements			
	2.4 Check drawings and plans meet needs, using IT tools and making corrections as necessary			
	2.5 Use appropriate presentation methods and accepted page layouts			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 103: Drawing and Planning Software 2

Unit code:	**DPS2**
Unit reference number:	**UD25 04**
SCQF level:	**5**
SCQF credit value:	**3**

Unit summary

This unit is about the skills and knowledge required by an IT user to select and use intermediate tools and techniques. They will use these to produce drawings and plans that are at times multi-step or non-routine. Any aspects that are unfamiliar may require support and advice.

2D drawing and planning software tools and techniques will be described as 'intermediate' because:

- the software tools and functions used will be at times non-routine or unfamiliar

- the choice and use of input, manipulation and output techniques will need to take account of a number of factors or elements; and

- the user will take some responsibility for inputting, structuring, editing and presenting the information, which at times may be non-routine or unfamiliar.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Input, organise and combine information for drawings or plans	1.1 Identify what types of shapes and other elements will be needed			
	1.2 Review templates and describe how they need to be changed to meet needs			
	1.3 Select, input and use the appropriate shapes to meet needs, including importing shapes from other sources			
	1.4 Select, adapt and use appropriate templates or blank documents			
	1.5 Identify what copyright constraints apply to the use of shapes or other elements			
	1.6 Combine information for drawings or plans including importing information produced using other software			
	1.7 Store and retrieve drawing files effectively, in line with local guidelines and conventions where available			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Use tools and techniques to edit, manipulate, format and present drawings or plans	2.1 Identify what drafting guides to use so that the shapes and other elements are appropriately prepared			
	2.2 Select and use appropriate software tools to manipulate and edit shapes and other elements with precision			
	2.3 Select and use appropriate software tools to format shapes and other elements, including applying styles and colour schemes			
	2.4 Check drawings or plans meet needs, using IT tools and making corrections as necessary			
	2.5 Identify and respond to any quality problems with drawings or plans to make sure they meet needs			
	2.6 Select and use appropriate presentation methods and accepted page layouts			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 104: Drawing and Planning Software 3

Unit code: DPS3

Unit reference number: UD26 04

SCQF level: 6

SCQF credit value: 4

Unit summary

This unit is about the skills and knowledge required by an IT user to select and use advanced tools and techniques. Learners will use these tools and techniques to produce complex and non-routine drawings and plans.

2D drawing and planning software tools and techniques will be described as 'advanced' because:

- the software tools and functions used will be complex and at times require new learning, which will involve having the idea that there may be a tool or function to do something (for example improve efficiency or create an effect), exploring technical support, self-teaching and applying

- the inputting, manipulating and outputting techniques will be complex, and will involve research, identification and application; and

- the user will take full responsibility for inputting, structuring, editing and presenting the information.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Input, organise and combine information for drawings or plans	1.1 Identify what types of shapes and other elements will be needed			
	1.2 Evaluate templates and explain why and how they need to be changed to meet needs			
	1.3 Select, adapt, create and use the appropriate shapes to meet needs, including shapes imported from other sources			
	1.4 Select, adapt, define and create appropriate templates and styles to meet needs			
	1.5 Provide guidance on what copyright constraints apply to the use of own and others' shapes or other elements			
	1.6 Combine information for drawings or plans including exporting outcomes to other software			
	1.7 Store and retrieve drawing files effectively, in line with local guidelines and conventions where available			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Use tools and techniques to edit, manipulate, format and present drawings or plans	2.1 Explain what drafting guides to use so that the shapes and other elements are appropriately prepared			
	2.2 Select and use appropriate software tools to manipulate and edit shapes and other elements with precision			
	2.3 Select and use appropriate software tools to format shapes and other elements, including applying styles and colour schemes			
	2.4 Check drawings or plans meet needs, using IT tools and making corrections as necessary			
	2.5 Identify and respond to quality problems with drawings or plans to make sure they are fit for purpose and meet needs			
	2.6 Explain what context the drawings and plans will be used in and how this will effect how they are presented			
	2.7 Select and use appropriate presentation methods and accepted page layouts			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 105: Multimedia Software 1

Unit code: **MM1**

Unit reference number: **UD27 04**

SCQF level: **4**

SCQF credit value: **3**

Unit summary

In general, multimedia includes a combination of text, audio, still images, animation, video, and interactive content.

This unit is about the skills and knowledge required by an IT user to use a range of basic multimedia tools and techniques. Learners will use these tools and techniques to produce straightforward or routine publications. Any aspect that is unfamiliar will require support and advice from others.

Publication tools and techniques will be described as 'basic' because:

- the software tools and functions will be predefined or commonly used

- the range of entry, manipulation and outputting techniques will be straightforward or routine; and

- the inputting, manipulating and outputting of the information will be predetermined, straightforward or routine.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Plan the content and organisation of multimedia products to meet needs	1.1	Use simple techniques to plan the content and organisation of multimedia products			
		1.2	Identify the type of multimedia outcome to meet requirements			
		1.3	Identify what is required in the specification			
		1.4	Identify copyright or other constraints for using others' information			
2	Obtain, input and combine content to build multimedia outcomes	2.1	Select and use an appropriate input device to enter content for multimedia outcomes			
		2.2	Combine information of different types or from different sources for multimedia outcomes			
		2.3	Identify the file format and storage media to use			
		2.4	Select and use appropriate software to write multimedia files			
		2.5	Store and retrieve multimedia files effectively, in line with local guidelines and conventions where available			
3	Use multimedia software tools to edit and format multimedia content to meet requirements	3.1	Select and use appropriate techniques to edit and format multimedia outcomes			
		3.2	Manipulate images and graphic elements accurately			
		3.3	Check multimedia outcomes meet needs, using IT tools and making corrections as necessary			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Play and present multimedia outcomes	4.1 Identify what display device to use for multimedia outcomes			
	4.2 Use appropriate techniques to navigate and display multimedia outcomes			
	4.3 Control the playback of multimedia files			
	4.4 Adjust display settings to meet needs			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 106: Multimedia Software 2

Unit code: MM2

Unit reference number: UD28 04

SCQF level: 5

SCQF credit value: 4

Unit summary

In general, multimedia includes a combination of text, audio, still images, animation, video, and interactive content.

This unit is about the skills and knowledge required by an IT user to select and use a wide range of intermediate multimedia tools and techniques effectively. Learners will use these tools and techniques to produce publications that are at times non-routine or unfamiliar.

Publication tools and techniques will be described as 'intermediate' because:

- the software tools and functions used will be at times non-routine or unfamiliar

- the choice and use of input, manipulation and output techniques will need to take account of a number of factors or elements; and

- the user will take some responsibility for inputting, structuring, editing and presenting the information, which at times may be non-routine or unfamiliar.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Plan the content and organisation of multimedia products to meet needs	1.1 Describe the type of multimedia outcome needed and the specification that it must meet			
	1.2 Select and use appropriate techniques to plan and communicate the content, design and layout of multimedia products			
	1.3 Identify how the different elements of the content will be sourced and how they will relate in the design layout			
	1.4 Plan the use of interactive features and transitions to meet needs			
	1.5 Describe how copyright and other constraints affect use of own and others' information			
2 Obtain, input and combine content to build multimedia outcomes	2.1 Select and use an appropriate combination of input device, software and input techniques to obtain and input relevant content for multimedia outcomes			
	2.2 Combine information of different types or from different sources for multimedia outcomes			
	2.3 Describe the file format and storage media to use			
	2.4 Store and retrieve multimedia files effectively, in line with local guidelines and conventions where available			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Use multimedia software tools to edit and format multimedia content to meet requirements	3.1	Select and use appropriate techniques to edit and format multimedia outcomes			
		3.2	Manipulate images and graphic elements accurately			
		3.3	Check multimedia outcomes meet needs, using IT tools and making corrections as necessary			
		3.4	Adjust outcomes in response to any identified quality problems			
4	Play and present multimedia outcomes	4.1	Described what combination of display device and software to use for displaying different multimedia file formats			
		4.2	Select and use appropriate software for displaying multimedia outcomes			
		4.3	Select and use appropriate navigation techniques and playback controls to suit the files			
		4.4	Adjust the display settings of the software and display device to present outcomes effectively			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 107:   Multimedia Software 3

Unit code: MM3

Unit reference number: UD29 04

SCQF level: 6

SCQF credit value: 6

Unit summary

In general, multimedia includes a combination of text, audio, still images, animation, video, and interactive content.

This unit is about the skills and knowledge required by an IT user to select and use a wide range of advanced multimedia tools and techniques effectively. Learners will use these tools and techniques to produce publications that are at times non-routine or unfamiliar. Any aspect that is unfamiliar will require support and advice from others.

Publication tools and techniques will be described as 'advanced' because:

- the software tools and functions used will be complex and at times require new learning, which will involve having the idea that there may be a tool or function to do something (for example improve efficiency or create an effect), exploring technical support, self-teaching and applying

- the inputting, manipulating and outputting techniques will be complex, and will involve research, identification and application; and

- the user will take full responsibility for inputting, structuring, editing and presenting the information.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Plan the content and organisation of multimedia products to meet needs	1.1 Select and use appropriate techniques to plan and communicate the content, design and layout of multimedia outcomes			
	1.2 Plan the use of interactive features, transitions and effects to meet needs			
	1.3 Explain the type of multimedia outcome needed and the specification that it must meet			
	1.4 Develop the design layout for multimedia outcomes			
	1.5 Explain how the different elements of the content will relate and what elements of the content will be interactive			
	1.6 Summarise how copyright and other constraints affect use of own and others' information			
2 Obtain, input and combine content to build multimedia outcomes	2.1 Select and use an appropriate combination of input device, software and input techniques to obtain and input the relevant content			
	2.2 Combine information of different types or from different sources for multimedia outcomes			
	2.3 Select and use appropriate software to write and compress multimedia files			
	2.4 Store and retrieve multimedia files effectively, in line with local guidelines and conventions where available			
	2.5 Explain when and why to use different file formats and file compression for saving multimedia files			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Use tools and techniques to build and edit multimedia content	3.1 Select and use appropriate techniques to edit and format multimedia outcomes			
	3.2 Manipulate images and graphic elements accurately			
	3.3 Check multimedia outcomes meet needs, using IT tools and making corrections as necessary			
	3.4 Identify and respond appropriately to quality problems to ensure that outcomes are fit for purpose and meet needs			
4 Play and present multimedia outcomes	4.1 Explain what combination of display device and software to use that will overcome any constraints there may be in displaying different multimedia file formats			
	4.2 Select and use appropriate software to optimise the display of multimedia outcomes and maximise impact			
	4.3 Select and adjust the display settings to exploit the features of the display device and optimise the quality of the presentation			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 108: Presentation Software 1

Unit code: PS1

Unit reference number: UD30 04

SCQF level: 4

SCQF credit value: 3

Unit summary

This unit is about the skills and knowledge required by an IT user to use a range of basic presentation software tools and techniques. Learners will use these tools and techniques to produce straightforward or routine presentations which include a combination of media (for example images, animation and sound) for education, entertainment or information sharing.

Any aspect that is unfamiliar will require support and advice from others.

Presentation tools and techniques at this level are described as 'basic' because:

- the software tools and functions will be predefined or commonly used

- the range of entry, manipulation and outputting techniques will be straightforward or routine; and

- the inputting, manipulating and outputting of the information will be predetermined, straightforward or routine.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Input and combine text and other information within presentation slides	1.1 Identify what types of information are required for the presentation			
	1.2 Select and use different slide layouts as appropriate for different types of information			
	1.3 Enter information into presentation slides so that it is ready for editing and formatting			
	1.4 Identify any constraints which may affect the presentation			
	1.5 Combine information of different forms or from different sources for presentations			
	1.6 Store and retrieve presentation files effectively, in line with local guidelines and conventions where available			
2 Use presentation software tools to structure, edit and format slides	2.1 Identify what slide structure to use			
	2.2 Select and use an appropriate template to structure slides			
	2.3 Select and use appropriate techniques to edit slides			
	2.4 Select and use appropriate techniques to format slides			
3 Prepare slides for presentation to meet needs	3.1 Identify how to present slides to meet needs and communicate effectively			
	3.2 Prepare slides for presentation			
	3.3 Check presentation meets needs, using IT tools and making corrections as necessary			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 109: Presentation Software 2

Unit code: PS2

Unit reference number: UD31 04

SCQF level: 5

SCQF credit value: 4

Unit summary

This unit is about the skills and knowledge required by an IT user to select and use a wide range of intermediate presentation software tools and techniques effectively. Learners will use these tools and techniques to produce presentations that include a combination of media (for example images, animation and sound) for education, entertainment or information sharing, at times they will be non-routine or unfamiliar.

Any aspect that is unfamiliar may require support and advice from others.

Presentation tools and techniques at this level will be described as 'intermediate' because:

- the software tools and functions used will be at times non-routine or unfamiliar

- the choice and use of input, manipulation and output techniques will need to take account of a number of factors or elements; and

- the user will take some responsibility for inputting, structuring, editing and presenting the information, which at times may be non-routine or unfamiliar.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Input and combine text and other information within presentation slides	1.1 Identify what types of information are required for the presentation			
	1.2 Enter text and other information using layouts appropriate to type of information			
	1.3 Insert charts and tables into presentation slides			
	1.4 Insert images, video or sound to enhance the presentation			
	1.5 Identify any constraints which may affect the presentation			
	1.6 Organise and combine information of different forms or from different sources for presentations			
	1.7 Store and retrieve presentation files effectively, in line with local guidelines and conventions where available			
2 Use presentation software tools to structure, edit and format slide sequences	2.1 Identify what slide structure and themes to use			
	2.2 Select, change and use appropriate templates for slides			
	2.3 Select and use appropriate techniques to edit slides and presentations to meet needs			
	2.4 Select and use appropriate techniques to format slides and presentations			
	2.5 Identify what presentation effects to use to enhance the presentation			
	2.6 Select and use animation and transition effects appropriately to enhance slide sequences			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Prepare slideshow for presentation	3.1 Describe how to present slides to meet needs and communicate effectively			
	3.2 Prepare slideshow for presentation			
	3.3 Check presentation meets needs, using IT tools and making corrections as necessary			
	3.4 Identify and respond to any quality problems with presentations to ensure that presentations meet needs			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 110: Presentation Software 3

Unit code: PS3

Unit reference number: UD32 04

SCQF level: 6

SCQF credit value: 6

Unit summary

This unit is about the skills and knowledge required by an IT user to select and use a wide range of advanced presentation software tools and techniques effectively. Learners will use these tools and techniques to produce presentations that include a combination of media (for example images, animation and sound) for education, entertainment or information sharing, that are complex or non-routine.

Presentation tools and techniques will be described as 'advanced' because:

- the software tools and functions used will be complex and at times require new learning, which will involve having the idea that there may be a tool or function to do something (for example improve efficiency or create an effect), exploring technical support, self-teaching and applying

- the inputting, manipulating and outputting techniques will be complex, and will involve research, identification and application; and

- the user will take full responsibility for inputting, structuring, editing and presenting the information.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Input and combine text and other information within presentation slides	1.1 Explain what types of information are required for the presentation			
	1.2 Enter text and other information using layouts appropriate to type of information			
	1.3 Insert charts and tables and link to source data			
	1.4 Insert images, video or sound to enhance the presentation			
	1.5 Identify any constraints which may affect the presentation			
	1.6 Organise and combine information for presentations in line with any constraints			
	1.7 Store and retrieve presentation files effectively, in line with local guidelines and conventions where available			
2 Use presentation software tools to structure, edit and format presentations	2.1 Explain when and how to use and change slide structure and themes to enhance presentations			
	2.2 Create, amend and use appropriate templates and themes for slides			
	2.3 Explain how interactive and presentation effects can be used to aid meaning or impact			
	2.4 Select and use appropriate techniques to edit and format presentations to meet needs			
	2.5 Create and use interactive elements to enhance presentations			
	2.6 Select and use animation and transition techniques appropriately to enhance presentations			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Prepare interactive slideshow for presentation	3.1 Explain how to present slides to communicate effectively for different contexts			
	3.2 Prepare interactive slideshow and associated products for presentation			
	3.3 Check presentation meets needs, using IT tools and making corrections as necessary			
	3.4 Evaluate presentations, identify any quality problems and discuss how to respond to them			
	3.5 Respond appropriately to quality problems to ensure that presentations meet needs and are fit for purpose			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 111: Project Management Software 1

Unit code: PM1

Unit reference number: UD33 04

SCQF level: 4

SCQF credit value: 3

Unit summary

This unit is about the skills and knowledge required by an IT user to use a range of basic project management software tools and techniques. Learners will use these tools and techniques to input and edit straightforward or routine information about projects. Any aspect that is unfamiliar will require support and advice from others.

At this level, project management tools and techniques will be described as 'basic' because:

- the software tools and functions will be predefined in templates or commonly used

- the range of entry, manipulation and outputting techniques will be straightforward or routine; and

- the inputting, manipulating and outputting of the information is in response to prompts and is directed by the project manager.

This unit is not about managing a project although these standards may also be applicable to the project manager.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Create and define a project	1.1 Identify the main components of the project management software			
	1.2 Identify the information about the project that must be included			
	1.3 Create a new project file using templates where appropriate			
	1.4 Store and retrieve project management files effectively in line with local guidelines for storage and use of data where applicable			
2 Enter and edit information about project tasks and resources	2.1 Identify types of tasks, milestones, deadlines and constraints			
	2.2 Enter and edit information about project tasks			
	2.3 Identify time and resources required for the project			
	2.4 Apply a task calendar for scheduling tasks			
	2.5 Enter and edit information about resources for use in the project			
	2.6 Mark any dependencies between tasks			
	2.7 Assign resources to tasks			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Update information about project progress	3.1	Use editing and formatting techniques to update project elements			
		3.2	Update task status in line with progress			
		3.3	Update information about resources as required			
4	Select and use appropriate tools and techniques to display and report on project status	4.1	Use filtering and formatting techniques to display project information to meet needs			
		4.2	Select and generate project reports using pre-defined formats to meet needs			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 112: Project Management Software 2

Unit code: PM2

Unit reference number: UD34 04

SCQF level: 5

SCQF credit value: 4

Unit summary

This unit is about the skills and knowledge required by an IT user to select and use a wide range of intermediate project management software tools and techniques. Learners will use these tools and techniques to input and edit information that is at times non-routine or unfamiliar in order to support the planning and management of projects.

Project management tools and techniques will be described as 'intermediate' because:

- the software tools and functions used will be at times non-routine

- the choice and use of input, manipulation and output techniques will need to take account of a number of factors or elements; and

- the user will take some responsibility for inputting, structuring, editing and presenting the information, which at times may be non-routine or unfamiliar.

This unit is not about managing a project although these standards may also be applicable to the project manager.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Create and define a project	1.1 Identify the critical information about the project that must be included			
	1.2 Create, store and retrieve project management files effectively in line with local guidelines for storage and use of data where applicable			
	1.3 Define the project file properties and project options			
2 Enter and edit information about project tasks and resources	2.1 Identify the critical tasks and milestones to be completed			
	2.2 Enter and edit information about project tasks			
	2.3 Identify any deadlines and constraints which apply to the project			
	2.4 Identify issues of resource availability and utilisation			
	2.5 Create and apply a task calendar for scheduling tasks			
	2.6 Enter and edit information about resources for use in the project			
	2.7 Adjust templates for project information			
	2.8 Set up and edit dependencies between tasks			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Update information about project progress	3.1 Describe the methods to update and report information about project progress			
	3.2 Use editing and formatting techniques to update project elements			
	3.3 Update task status in line with progress			
	3.4 Update information about resources as required			
	3.5 Compare actual progress with project baseline and reschedule uncompleted tasks			
	3.6 Identify any risks and issues that may have an impact on the project			
4 Select and use appropriate tools and techniques to display and report on project status	4.1 Select and create project reports to meet needs			
	4.2 Use filtering and formatting techniques to display project information to meet needs			
	4.3 Share project information with other applications			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 113: Project Management Software 3

Unit code: PM3

Unit reference number: UD35 04

SCQF level: 6

SCQF credit value: 5

Unit summary

This unit is about the skills and knowledge required by an IT user to select and use a wide range of advanced project management software tools and techniques. Learners will use these tools and techniques to input and modify complex information to support the planning and management of multiple projects.

Project management tools and techniques at this level will be described as 'advanced' because:

- the software tools and functions used will be complex and at times require the user to search for and apply a solution or alternative approach by exploring technical support, or self-teaching

- approaches to the inputting, manipulating and outputting of information will be complex, and will involve research, identification and application; and

- the user will take full responsibility for inputting, structuring, editing and managing the information within the software package.

This unit is not about managing a project although these standards may also be applicable to the project manager.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Create and define a project	1.1 Explain the critical information about the project that must be included			
	1.2 Create, store and retrieve project management files in line with local guidelines where applicable			
	1.3 Define the project file properties and project options			
	1.4 Create master and sub-projects			
	1.5 Create links across projects and manage changes to linked tasks			
2 Enter and edit information about project tasks and resources	2.1 Identify the critical tasks and milestones to be completed			
	2.2 Explain how to set up any deadlines and constraints which apply to the project			
	2.3 Enter and edit information about project tasks			
	2.4 Explain how to resolve issues of resource availability and utilisation			
	2.5 Enter and edit information about resources to be used in the project			
	2.6 Create and apply a task calendar for scheduling tasks			
	2.7 Identify and resolve any issues of resource allocation			
	2.8 Define and set up dependencies between tasks			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Update information about project progress	3.1 Explain the methods available to track project progress and review against plans			
	3.2 Use editing and formatting techniques to update project elements			
	3.3 Update task status in line with progress			
	3.4 Update information about resources as required			
	3.5 Compare actual progress with project baseline and reschedule uncompleted tasks			
	3.6 Identify and assess the impact of risks and issues on the project			
	3.7 Manage information on project risks and issues			
4 Select and use appropriate tools and techniques to display and report on project status	4.1 Create and customise project reports to meet needs			
	4.2 Use filtering and formatting techniques to display project information to meet needs			
	4.3 Share project information with other applications			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 114: Bespoke Software 1

Unit code: BS1

Unit reference number: UD36 04

SCQF level: 4

SCQF credit value: 2

Unit summary

This unit is about the skills and knowledge needed by an IT user to use basic bespoke software tools and techniques appropriately for straightforward or routine information. Any aspect that is unfamiliar will require support and advice from others.

Bespoke software tools and techniques will be defined as 'basic' because:

- the software tools and functions involved will be pre-defined or commonly used

- the range of inputting, manipulation and outputting techniques are straightforward or routine; and

- the data type and structure will be predetermined or familiar.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Input, organise and combine information using bespoke software	1.1 Input relevant information accurately into existing templates and/or files so that it is ready for processing			
	1.2 Organise and combine information of different forms or from different sources			
	1.3 Follow local and/or legal guidelines for the storage and use of data where available			
	1.4 Respond appropriately to data entry error messages			
2 Use tools and techniques to edit, process, format and present information	2.1 Use appropriate tools and techniques to edit, process and format information			
	2.2 Check information meets needs, using IT tools and making corrections as appropriate			
	2.3 Use appropriate presentation methods and accepted layouts			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 115: Bespoke Software 2

Unit code: BS2

Unit reference number: UD37 04

SCQF level: 5

SCQF credit value: 3

Unit summary

This unit is about the skills and knowledge needed by an IT user to select and use a wide range of intermediate bespoke software tools and techniques for information that is at times non-routine or unfamiliar. Any aspect that is unfamiliar may require support and advice from others.

Bespoke software tools and techniques will be defined as 'intermediate' because:

- the software tools and functions involved will at times be non-routine or unfamiliar

- the choice and use of input, manipulation and output techniques will need to take account of a number of factors or elements and at times be multi-step

- the user will take some responsibility for inputting, manipulating and outputting the information.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Input and combine information using bespoke applications	1.1 Input relevant information accurately so that it is ready for processing			
	1.2 Select and use appropriate techniques to link and combine information of different forms or from different sources within the software			
	1.3 Respond appropriately to data entry error messages			
2 Use appropriate structures to organise and retrieve information efficiently	2.1 Describe what functions to apply to structure and layout information effectively			
	2.2 Select and use appropriate structures and/or layouts to organise information			
	2.3 Apply local and/or legal guidelines and conventions for the storage and use of data where available			
3 Use the functions of the software effectively to process and present information	3.1 Select and use appropriate tools and techniques to edit, process and format information			
	3.2 Check information meets needs, using IT tools and making corrections as necessary			
	3.3 Select and use appropriate methods to present information			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 116: Bespoke Software 3

Unit code: BS3

Unit reference number: UD38 04

SCQF level: 6

SCQF credit value: 4

Unit summary

This unit is about the skills and knowledge needed by an IT user to select and use a range of advanced bespoke software tools and techniques for complex or non-routine information.

Bespoke software tools and techniques at this level are defined as 'advanced' because:

- the software tools and functions used will be complex, and at times involve having the idea that there may be a tool or function to do something (for example improve efficiency or create an effect), exploring technical support, self-teaching and applying

- the inputting, manipulating and outputting techniques will be complex, and will involve research, identification and application; and

- the user will take full responsibility for inputting, manipulating and outputting the information.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Input and combine information using bespoke software	1.1	Input relevant information accurately so that it is ready for processing			
		1.2	Select and use appropriate techniques to link and combine information within the application and across different software applications			
2	Create and modify appropriate structures to organise and retrieve information efficiently	2.1	Evaluate the use of software functions to structure, layout and style information			
		2.2	Create, change and use appropriate structures and/or layouts to organise information efficiently			
		2.3	Manage data files effectively, in line with local and/or legal guidelines and conventions for the storage and use of data where available			
3	Exploit the functions of the software effectively to process and present information	3.1	Select and use appropriate tools and techniques to edit, analyse and format information			
		3.2	Check information meets needs, using IT tools and making corrections as necessary			
		3.3	Identify and respond appropriately to quality problems to ensure that outcomes are fit for purpose and meet needs			
		3.4	Select and use presentation methods to aid clarity and meaning			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 117: Specialist Software 1

Unit code: BS1

Unit reference number: UD39 04

SCQF level: 4

SCQF credit value: 2

Unit summary

This unit is about the skills and knowledge needed by an IT user to use basic specialist software tools and techniques appropriately for straightforward or routine information. Any aspect that is unfamiliar will require support and advice from others.

Specialist software tools and techniques will be defined as 'basic' because:

- the software tools and functions involved will be pre-defined or commonly used

- the range of inputting, manipulation and outputting techniques are straightforward or routine; and

- the data type and structure will be predetermined or familiar.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Input, organise and combine information using specialist software	1.1 Input relevant information accurately into existing templates and/or files so that it is ready for processing			
	1.2 Organise and combine information of different forms or from different sources			
	1.3 Follow local and/or legal guidelines for the storage and use of data where available			
	1.4 Respond appropriately to data entry error messages			
2 Use tools and techniques to edit, process, format and present information	2.1 Use appropriate tools and techniques to edit, process or format information			
	2.2 Check information meets needs, using IT tools and making corrections as necessary			
	2.3 Use appropriate presentation methods and accepted layouts			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 118: Specialist Software 2

Unit code: BS2

Unit reference number: UD40 04

SCQF level: 5

SCQF credit value: 3

Unit summary

This unit is about the skills and knowledge needed by an IT user to select and use a wide range of intermediate specialist software tools and techniques for information that is at times non-routine or unfamiliar. Any aspect that is unfamiliar may require support and advice from others.

Specialist software tools and techniques will be defined as 'intermediate' because:

- the software tools and functions involved will at times be non-routine or unfamiliar

- the choice and use of input, manipulation and output techniques will need to take account of a number of factors or elements at times be multi-step

- the user will take some responsibility for inputting, manipulating and outputting the information.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Input and combine information using specialist applications	1.1 Input relevant information accurately so that it is ready for processing			
	1.2 Select and use appropriate techniques to link and combine information of different forms or from different sources within the software			
	1.3 Respond appropriately to data entry error messages			
2 Use appropriate structures to organise and retrieve information efficiently	2.1 Describe what functions to apply to structure and layout information effectively			
	2.2 Select and use appropriate structures and/or layouts to organise information			
	2.3 Apply local and/or legal guidelines and conventions for the storage and use of data where available			
3 Use the functions of the software effectively to process and present information	3.1 Select and use appropriate tools and techniques to edit, process and format information			
	3.2 Check information meets needs, using IT tools and making corrections as necessary			
	3.3 Select and use appropriate methods to present information			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 119: Specialist Software 3

Unit code: BS3

Unit reference number: UD41 04

SCQF level: 6

SCQF credit value: 4

Unit summary

This unit is about the skills and knowledge needed by an IT user to select and use a range of advanced of specialist software tools and techniques for complex or non-routine information.

Specialist software tools and techniques at this level are defined as 'advanced' because:

- the software tools and functions used will be complex, and at times involve having the idea that there may be a tool or function to do something (for example improve efficiency or create an effect), exploring technical support, self-teaching and applying

- the inputting, manipulating and outputting techniques will be complex, and will involve research, identification and application; and

- the user will take full responsibility for inputting, manipulating and outputting the information.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Input and combine information using specialist software	1.1 Input relevant information accurately so that it is ready for processing			
	1.2 Select and use appropriate techniques to link and combine information within the application and across different software applications			
2 Create and modify appropriate structures to organise and retrieve information efficiently	2.1 Evaluate the use of software functions to structure, layout and style information			
	2.2 Create, change and use appropriate structures and/or layouts to organise information efficiently			
	2.3 Manage data files effectively, in line with local and/or legal guidelines and conventions for the storage and use of data where available			
3 Exploit the functions of the software effectively to process and present information	3.1 Select and use appropriate tools and techniques to edit, analyse and format information			
	3.2 Check information meets needs, using IT tools and making corrections as necessary			
	3.3 Identify and respond appropriately to quality problems to ensure that outcomes are fit for purpose and meet needs			
	3.4 Select and use presentation methods to aid clarity and meaning			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 120: Spreadsheet Software 1

Unit code: SS1

Unit reference number: UD42 04

SCQF level: 4

SCQF credit value: 3

Unit summary

This unit is about the skills and knowledge required by an IT user to use a range of basic spreadsheet software tools and techniques to produce, present and check spreadsheets that are straightforward or routine. Any aspect that is unfamiliar will require support and advice from others.

Spreadsheet software tools and techniques will be described as 'basic' because:

- the range of data entry, manipulation, formatting and outputting techniques are straightforward

- the tools, formulas and functions involved will be predetermined or commonly used (for example, sum, divide, multiply, take away and fractions); and

- the structure and functionality of the spreadsheet will be predetermined or familiar.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Use a spreadsheet to enter, edit and organise numerical and other data	1.1 Identify what numerical and other information is needed and how the spreadsheet should be structured to meet needs			
	1.2 Enter and edit numerical and other data accurately			
	1.3 Store and retrieve spreadsheet files effectively, in line with local guidelines and conventions where available			
2 Use appropriate formulas and tools to summarise and display spreadsheet information	2.1 Identify how to summarise and display the required information			
	2.2 Use functions and formulas to meet calculation requirements			
	2.3 Use spreadsheet tools and techniques to summarise and display information			
3 Select and use appropriate tools and techniques to present spreadsheet information effectively	3.1 Select and use appropriate tools and techniques to format spreadsheet cells, rows and columns			
	3.2 Identify which chart or graph type to use to display information			
	3.3 Select and use appropriate tools and techniques to generate, develop and format charts and graphs			
	3.4 Select and use appropriate page layout to present and print spreadsheet information			
	3.5 Check information meets needs, using spreadsheet tools and making corrections as necessary			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 121: Spreadsheet Software 2

Unit code: SS2

Unit reference number: UD43 04

SCQF level: 5

SCQF credit value: 4

Unit summary

This level is about the skills and knowledge required by an IT user to select and use a wide range of intermediate spreadsheet software tools and techniques to produce, present, and check spreadsheets that are at times non-routine or unfamiliar. Any aspect that is unfamiliar may require support and advice from others.

Spreadsheet software tools and techniques will be described as 'intermediate' because:

- the range of data entry, manipulation and outputting techniques will be at times non-routine or unfamiliar

- the tools, formulas and functions needed to analyse and interpret the data requires knowledge and understanding (for example mathematical, logical, statistical or financial); and

- the user will take some responsibility for setting up or developing the structure and functionality of the spreadsheet.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Use a spreadsheet to enter, edit and organise numerical and other data	1.1 Identify what numerical and other information is needed in the spreadsheet and how it should be structured			
	1.2 Enter and edit numerical and other data accurately			
	1.3 Combine and link data across worksheets			
	1.4 Store and retrieve spreadsheet files effectively, in line with local guidelines and conventions where available			
2 Select and use appropriate formulas and data analysis tools to meet requirements	2.1 Identify which tools and techniques to use to analyse and manipulate data to meet requirements			
	2.2 Select and use a range of appropriate functions and formulas to meet calculation requirements			
	2.3 Use a range of tools and techniques to analyse and manipulate data to meet requirements			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Select and use tools and techniques to present and format spreadsheet information	3.1 Plan how to present and format spreadsheet information effectively to meet needs			
	3.2 Select and use appropriate tools and techniques to format spreadsheet cells, rows, columns and worksheets			
	3.3 Select and format an appropriate chart or graph type to display selected information			
	3.4 Select and use appropriate page layout to present and print spreadsheet information			
	3.5 Check information meets needs, using spreadsheet tools and making corrections as necessary			
	3.6 Describe how to find errors in spreadsheet formulas			
	3.7 Respond appropriately to any problems with spreadsheets			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 122: Spreadsheet Software 3

Unit code: SS3

Unit reference number: UD44 04

SCQF level: 6

SCQF credit value: 6

Unit summary

This unit is about the skills and knowledge required by an IT user to select and use a wide range of advanced spreadsheet software tools and techniques to produce, present and check complex and non-routine spreadsheets.

Spreadsheet software tools and techniques will be described as 'advanced' because:

- the range of data entry, manipulation and outputting techniques will be complex and non-routine

- the tools, formulas and functions needed to analyse and interpret the required information require complex and non-routine knowledge and understanding (for example data restrictions, data validation using formula, pivot tables, data maps); and

- the user will take full responsibility for setting up and developing the functionality of the spreadsheet.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Use a spreadsheet to enter, edit and organise numerical and other data	1.1 Identify what numerical and other information is needed in the spreadsheet and how it should be structured			
	1.2 Enter and edit numerical and other data accurately			
	1.3 Combine and link data from different sources			
	1.4 Store and retrieve spreadsheet files effectively, in line with local guidelines and conventions where available			
2 Select and use appropriate formulas and data analysis tools and techniques to meet requirements	2.1 Explain what methods can be used to summarise, analyse and interpret spreadsheet data and when to use them			
	2.2 Select and use a wide range of appropriate functions and formulas to meet calculation requirements			
	2.3 Select and use a range of tools and techniques to analyse and interpret data to meet requirements			
	2.4 Select and use forecasting tools and techniques			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Use tools and techniques to present, and format and publish spreadsheet information	3.1 Explain how to present and format spreadsheet information effectively to meet needs			
	3.2 Select and use appropriate tools and techniques to format spreadsheet cells, rows, columns and worksheets effectively			
	3.3 Select and use appropriate tools and techniques to generate, develop and format charts and graphs			
	3.4 Select and use appropriate page layout to present, print and publish spreadsheet information			
	3.5 Explain how to find and sort out any errors in formulas			
	3.6 Check spreadsheet information meets needs, using IT tools and making corrections as necessary			
	3.7 Use auditing tools to identify and respond appropriately to any problems with spreadsheets			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 123:   Website Software 1

Unit code: **WS1**

Unit reference number: **UD45 04**

SCQF level: **4**

SCQF credit value: **3**

Unit summary

This unit is about the skills and knowledge required by an IT user to use basic website software tools and techniques appropriately to produce straightforward or routine single web pages from pre-set templates. Any aspect that is unfamiliar will require support and advice from others.

Website software tools and techniques will be described as 'basic' because:

- the software tools and functions involved will be predefined or commonly used

- the range of inputting, manipulation and outputting techniques are straightforward or routine; and

- the template used for the content will be predetermined or familiar.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Plan and create web pages	1.1 Identify what content and layout will be needed in the web page			
	1.2 Identify the purpose of the webpage and intended audience			
	1.3 Select and use a website design template to create a single web page			
	1.4 Enter or insert content for web pages so that it is ready for editing and formatting			
	1.5 Organise and combine information needed for web pages			
	1.6 Identify copyright and other constraints on using others' information			
	1.7 Identify what file types to use for saving content			
	1.8 Store and retrieve web files effectively, in line with local guidelines and conventions where available			
2 Use website software tools to structure and format web pages	2.1 Identify what editing and formatting to use to aid both clarity and navigation			
	2.2 Select and use website features to help the user navigate simple websites			
	2.3 Use appropriate editing and formatting techniques			
	2.4 Check web pages meet needs, using IT tools and making corrections as necessary			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Publish web pages to the internet or an intranet	3.1 Upload content to a website 3.2 Respond appropriately to common problems when testing a web page			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 124: Website Software 2

Unit code: WS2

Unit reference number: UD46 04

SCQF level: 5

SCQF Credit value: 4

Unit summary

This unit is about the skills and knowledge required by an IT user to select and use a wide range of intermediate website software tools and techniques to produce multiple-page websites. Any aspect that is unfamiliar may require support and advice from others.

Website software tools and techniques will be described as 'intermediate' because:

- the software tools and functions involved will at times be non-routine or unfamiliar

- the choice and use of development techniques will need to take account of a number of factors or elements; and

- the user will take some responsibility for planning the website, creating or altering the template, inputting, manipulating, linking and uploading the content.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Create structures and styles for websites	1.1 Describe what website content and layout will be needed for each page			
	1.2 Plan and create web page templates to layout			
	1.3 Select and use website features and structures to help the user navigate round web pages within the site			
	1.4 Create, select and use styles to keep the appearance of web pages consistent and make them easy to understand			
	1.5 Describe how copyright and other constraints may affect the website			
	1.6 Describe what access issues may need to be taken into account			
	1.7 Describe what file types to use for saving content			
	1.8 Store and retrieve files effectively, in line with local guidelines and conventions where available			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Use website software tools to prepare content for websites	2.1 Prepare content for web pages so that it is ready for editing and formatting			
	2.2 Organise and combine information needed for web pages including across different software			
	2.3 Select and use appropriate editing and formatting techniques to aid both clarity and navigation			
	2.4 Select and use appropriate development techniques to link information across pages			
	2.5 Change the file formats appropriately for content			
	2.6 Check web pages meet needs, using IT tools and making corrections as necessary			
3 Publish websites	3.1 Select and use appropriate testing methods to check that all elements of websites are working as planned			
	3.2 Identify any quality problems with websites and how to respond to them			
	3.3 Select and use an appropriate programme to upload and publish the website			
	3.4 Respond appropriately to problems with multiple page websites			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 125: Website Software 3

Unit code: WS3

Unit reference number: UD47 04

SCQF level: 6

SCQF credit value: 5

Unit summary

This unit is about the skills and knowledge required by an IT user to select and use a range of advanced website software tools and techniques to develop multiple-page websites with multimedia and interactive features.

Website software techniques will be described as 'advanced' because:

- the software tools and functions used will be complex and at times involve having the idea that there may be a tool or function to do something (for example improve efficiency or create an effect), exploring technical support, self-teaching and applying

- the development techniques will be complex, and will involve research, identification and application; and

- the user will take full responsibility for planning and developing the structure, inputting, manipulating, adding multimedia or interactive features, uploading and publishing the information.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Create structures and styles and use them to produce websites	1.1 Determine what website content and layout will be needed for each page and for the site			
	1.2 Plan and create web page templates to layout content			
	1.3 Select and use website features and structures to enhance website navigation and functionality			
	1.4 Create, select and use styles to enhance website consistency and readability			
	1.5 Provide guidance on laws, guidelines and constraints that affect the content and use of websites			
	1.6 Explain what access issues may need to be taken into account			
	1.7 Explain when and why to use different file types for saving content			
	1.8 Store and retrieve files effectively, in line with local guidelines and conventions where available			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Select and use website software tools and features to develop multiple page websites with multimedia and interactive features	2.1	Prepare content for web pages so that it is ready for editing and formatting			
		2.2	Organise and combine information needed for web pages in line with any copyright constraints, including across different software			
		2.3	Select and use appropriate editing and formatting techniques to aid meaning			
		2.4	Select and use appropriate programming and development techniques to add features and enhance websites			
		2.5	Select and use file formats that make information easier to download			
		2.6	Check web pages meet needs, using IT tools and making corrections as necessary			
3	Publish and test multiple page websites with multimedia and interactive features	3.1	Select and use appropriate testing methods to check that all elements and features of complex websites are working as planned			
		3.2	Identify any quality problems with websites and explain how to respond to them			
		3.3	Select and use an appropriate programme to upload and publish the website and make sure that it will download efficiently			
		3.4	Respond appropriately to quality problems with websites to ensure outcomes are fit for purpose			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 126: Word Processing Software 1

Unit code:	**WP1**
Unit reference number:	**UD48 04**
SCQF level:	**4**
SCQF credit value:	**3**

Unit summary

This unit is about the skills and knowledge required by an IT user to use a range of basic word processing software tools and techniques to produce appropriate, straightforward or routine documents. Any aspect that is unfamiliar will require support and advice from others.

Word processing tools and techniques will be described as 'basic' because:

- the software tools and functions will be predetermined or commonly used; and

- the techniques needed for text entry, manipulation and outputting will be straightforward or routine.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Enter, edit and combine text and other information accurately within word processing documents	1.1 Identify what types of information are needed in documents			
	1.2 Identify what templates are available and when to use them			
	1.3 Use keyboard or other input method to enter or insert text and other information			
	1.4 Combine information of different types or from different sources into a document			
	1.5 Enter information into existing tables, forms and templates			
	1.6 Use editing tools to amend document content			
	1.7 Store and retrieve document files effectively, in line with local guidelines and conventions where available			
2 Structure information within word processing documents	2.1 Create and modify tables to organise tabular or numeric information			
	2.2 Select and apply heading styles to text			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Use word processing software tools to format and present documents	3.1 Identify what formatting to use to enhance presentation of the document			
	3.2 Select and use appropriate techniques to format characters and paragraphs			
	3.3 Select and use appropriate page layout to present and print documents			
	3.4 Check documents meet needs, using IT tools and making corrections as necessary			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 127: Word Processing Software 2

Unit code: WP2

Unit reference number: UD49 04

SCQF level: 5

SCQF credit value: 4

Unit summary

This unit is about the skills and knowledge required by an IT user to select and use a range of intermediate word processing software tools and techniques to produce documents that are at times non-routine or unfamiliar. Any aspect that is unfamiliar may require support and advice from others.

Word-processing tools and techniques will be described as 'intermediate' because:

- the software tools and functions will be at times non-routine or unfamiliar

- the choice of techniques will need to take account of a number of factors or elements; and

- the user will take some responsibility for the inputting, manipulating and outputting of the information.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Enter and combine text and other information accurately within word processing documents	1.1 Identify what types of information are needed in documents			
	1.2 Use appropriate techniques to enter text and other information accurately and efficiently			
	1.3 Select and use appropriate templates for different purposes			
	1.4 Identify when and how to combine and merge information from other software or other documents			
	1.5 Select and use a range of editing tools to amend document content			
	1.6 Combine or merge information within a document from a range of sources			
	1.7 Store and retrieve document and template files effectively, in line with local guidelines and conventions where available			
2 Create and modify layout and structures for word processing documents	2.1 Identify the document requirements for structure and style			
	2.2 Identify what templates and styles are available and when to use them			
	2.3 Create and modify columns, tables and forms to organise information			
	2.4 Select and apply styles to text			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Use word processing software tools to format and present documents effectively to meet requirements	3.1 Identify how the document should be formatted to aid meaning			
	3.2 Select and use appropriate techniques to format characters and paragraphs			
	3.3 Select and use appropriate page and section layouts to present and print documents			
	3.4 Describe any quality problems with documents			
	3.5 Check documents meet needs, using IT tools and making corrections as necessary			
	3.6 Respond appropriately to quality problems with documents so that outcomes meet needs			

Learner name: _____   Date:_____

Learner signature: _____   Date:_____

Assessor signature: _____   Date:_____

Internal verifier signature: _____   Date:_____
(*if sampled*)

Unit 128: Word Processing Software 3

Unit code:	**WP3**
Unit reference number:	**UD50 04**
SCQF level:	**6**
SCQF credit value:	**6**

Unit summary

This unit is about the skills and knowledge required by an IT user to select and use a range of advanced word processing software tools and techniques to produce complex and non-routine documents.

Word-processing tools and techniques will be described as 'advanced' because:

- the software tools and functions will be complex and at times require new learning, which will involve having the idea that there may be a tool or function to do something (for example improve efficiency or create an effect), exploring technical support, self-teaching and applying

- the techniques required will be complex, and the process of selecting appropriate techniques may involve research, identification and application; and

- the user will take full responsibility for the inputting, manipulating and outputting of the information.

Assessment requirements/evidence requirements

Evidence of achievement can be derived from a variety of sources.

Learners who use their IT skills directly in their day-to-day work can prove their competence whilst doing so. Alternatively, learners can use scenarios and knowledge tests – or a mixture of both – to demonstrate competence.

Assessment methodology

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

Whilst assessors are required to have a sound understanding of the unit requirements and be able to give appropriate feedback to learners, they do not have to be A1 qualified. However, ideally every assessor should have ITQ Level 3 or equivalent in order to be able to adequately assess at that level and below. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Enter and combine text and other information accurately within word processing documents	1.1 Summarise what types of information are needed for the document and how they should be linked or integrated			
	1.2 Use appropriate techniques to enter text and other types of information accurately and efficiently			
	1.3 Create, use and modify appropriate templates for different types of documents			
	1.4 Explain how to combine and merge information from other software or multiple documents			
	1.5 Combine and merge information within a document from a range of sources			
	1.6 Store and retrieve document and associated files effectively, in line with local guidelines and conventions where available			
	1.7 Select and use tools and techniques to work with multiple documents or users			
	1.8 Customise interface to meet needs			
2 Create and modify appropriate layouts, structures and styles for word processing documents	2.1 Analyse and explain the requirements for structure and style			
	2.2 Create, use and modify columns, tables and forms to organise information			
	2.3 Define and modify styles for document elements			
	2.4 Select and use tools and techniques to organise and structure long documents			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Use word processing software tools and techniques to format and present documents effectively to meet requirements	3.1 Explain how the information should be formatted to aid meaning			
	3.2 Select and use appropriate techniques to format characters and paragraphs			
	3.3 Select and use appropriate page and section layouts to present and print multi-page and multi-section documents			
	3.4 Check documents meet needs, using IT tools and making corrections as necessary			
	3.5 Evaluate the quality of the documents produced to ensure they are fit for purpose			
	3.6 Respond appropriately to any quality problems with documents to ensure that outcomes meet needs and are fit for purpose			

Learner name: _____   Date: _____

Learner signature: _____   Date: _____

Assessor signature: _____   Date: _____

Internal verifier signature: _____   Date: _____
(*if sampled*)

Unit 129: Customer Apparatus and Line Installation

Unit code:	**CAL**
Unit reference number:	**UD73 04**
SCQF level:	**5**
SCQF credit value:	**22**

Unit summary

This unit gives learners the underpinning knowledge and skills required for a customer service engineer to complete the main technical tasks involved in delivering the last mile of the Telecoms network to the customer premises.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See *Annexe A* for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Run cables into the 'End User' premises and fit main and extension telephone sockets	1.1 Cite the importance for superb customer service 1.2 Recognize the key elements of the local access network 1.3 Drill holes to ISIS standard 1.4 Install External and Internal cabling in a customers premises 1.5 Wire PST/NTE sockets 1.6 State the different standard line conditions found in the Network 1.7 Use the HAWK tester to identify line conditions and faults			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Run dropwires in the BT overhead network	2.1 Identify and use the current tools and equipment required to provide, retention, recover and renew dropwire from customers premises to wooden and hollow poles			
	2.2 Provide, retention, renew and recover a single span of dropwire from a hollow pole to a simulated customer premises, which includes a road crossing			
	2.3 Apply the quality standards relating to working with dropwires, Customer Lead-in, Block Terminals and Customer Fixings when carrying out dropwire provision, renewal and recovery			
	2.4 State the current types of customers dropwire fixing			
	2.5 Provide a customer dropwire fixing using an Eyebolt Expanding 1A			
	2.6 Provide a customer's lead-in, up to but not including the point of entry into the customer's premises			
	2.7 Use Slide Rule Fixing Height – 1A, 1B and 1C. Provide, retention and recover a single span of dropwire from a wooden pole to a simulated customer premises			
	2.8 Identify the types of Low Voltage and High Voltage overhead power lines shown in the BT Health and Safety Handbook			
	2.9 State the restrictions of using dropwire near power lines			
	2.10 State the minimum separation distances between dropwires and power lines			
	2.11 State the correct equipment for measuring the height of power lines			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	2.12 State where Lightning Protection is fitted. Provide, renew and recover a single span of dropwire from a wooden pole to a simulated customer premises which includes a road crossing			
	2.13 Provide and recover a single span of dropwire, from a simulated customer's premises to wooden pole A. The dropwire span between pole A and the customer crosses over Low Voltage power			
	2.14 Carry out the correct wiring and terminating practices for cable dropwire at Box Connections 18A/19A, Block Terminals 76/86 Series, Block Terminal 71A, Block Terminals 41/41A, Box Connection 16A, Block Terminal 66B and NTE 5			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Cross connect circuits in primary and secondary cross connection points	3.1 State the purpose of Primary and Secondary Cross Connection Points (PCPs and SCPs) 3.2 List the termination systems used in PCPs and SCPs 3.3 State the quality standards required when provide jumpers on the following termination systems: • P100/PC100 • SCC No 1 • SCC No 2 • BIX MCCS • 3M MS2 MCCS • Krone MCCS • Quante MCCS 3.4 Cross connect circuits on and between Krone and Quante MCCS			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Work safely on wooden poles, steps and ladders	4.1 Select and carry a three-section aluminium ladder			
	4.2 Undertake a pre-use check on a three-section aluminium ladder			
	4.3 Safely load, secure and remove a ladder extension 4B or 5A from a BT vehicle using both the ladder removal tool (LRT) and the manual method			
	4.4 Erect a three-section aluminium ladder against a solid structure and secure them using a variety of ladder stability devices			
	4.5 Safely raise and use a drill at the working position on the ladder			
	4.6 Undertake a pre-use check on steps folding			
	4.7 Use steps folding safely			
	4.8 Erect, tie, climb, descend and then lower a three-section aluminium ladder against a wooden pole			
	4.9 Check, inspect and fit a Safety Belt No11 ready for use			
	4.10 Correctly adjust a Safety Belt No11			
	4.11 Correctly carry out a general pole test on the pole to be climbed			
	4.12 Safely climb, belt onto and turn on a pole of at least 9m length			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Carry out manual handling using the kinetic method	5.1 Demonstrate understanding of the principles of: • Base Movement • Legislation • Components of the Spine • Causes of Back Pain • Safer manual handling • Method of holding • Manual Handling and Risk Assessments 5.2 Carry out practical demonstrations using techniques recommended by ROSPA 5.3 Carry out practical exercises to practice skills in a safe environment			

Learner name: _____   Date:_____

Learner signature: _____   Date:_____

Assessor signature: _____   Date:_____

Internal verifier signature: _____   Date:_____
(*if sampled*)

Unit 130: Health and Safety in the Engineering Workplace

Unit code: HSE

Unit reference number: UD74 04

SCQF level: 6

SCQF credit value: 11

Unit summary

This unit will give learners an understanding of the key features of health and safety legislation and regulations and how these are applied in engineering to ensure safe working conditions.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See Annexe A for further information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand the key features of health and safety legislation and regulations	1.1 Explain the key features of relevant regulations on health and safety as applied to a working environment in two selected or given engineering organisations			
	1.2 Describe the roles and responsibilities under current health and safety legislation and regulations, of those involved			
2 Know how to identify and control hazards in the workplace	2.1 Describe the methods used to identify hazards in a working environment			
	2.2 Describe how hazards which become risks can be controlled			
3 Be able to carry out a risk assessment, identifying control measures	3.1 Carry out a risk assessment on a typical item/area of the working environment			
	3.2 Suggest suitable control measures after a risk assessment has been carried out and state the reasons why they are suitable			
4 Understand the methods used when reporting and recording accidents and incidents	4.1 Select and carry a three section aluminium ladder			
	4.2 Explain the principles that underpin reporting and recording accidents and incidents			
	4.3 Describe the procedures used to record and report accidents, dangerous occurrences or near misses			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 131: Presenting Information Using ICT

Unit code: PI1

Unit reference number: UD75 04

SCQF level: 5

SCQF credit value: 8

Unit summary

The aim of this unit is for learners to understand the purpose of different document types, know the software available to produce them and enable them to produce and review appropriate documents for differing audiences.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information. See Annexe A for further information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand the purpose of different document types	1.1	Explain the purpose of different document types			
2	Know appropriate software to present and communicate information	2.1	Describe the features of applications which make them suitable for presenting and communicating information			
3	Be able to produce appropriate documents for different audiences	3.1	Produce documents that meet the needs of defined audiences			
4	Be able to review documents	4.1	Use tools and techniques to enhance the presentation of information			
		4.2	Carry out a document review			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

12 Further information and useful publications

To get in touch with us visit our 'Contact us' pages:

- Edexcel: www.edexcel.com/contactus

- BTEC: www.btec.co.uk/contactus

- Pearson Work Based Learning: www.pearsonwbl.com/contactus

- books, software and online resources for UK schools and colleges: www.pearsonschools.co.uk/contactus

Other sources of information and publications available on our website include:

- *Pearson Equality Policy*

- *Pearson Work Based Learning Centre Guide*

- *Edexcel UK Information Manual – Chapter 9* (updated annually)

- *Recognition of Prior Learning Policy and Process.*

Further information and publications on the delivery and quality assurance of Competence-based qualifications is available on our website, at www.pearsonwbl.edexcel.com/NVQ-competence-based.

Our publications catalogue lists all the material available to support our qualifications. To access the catalogue and order publications, please go to www.edexcel.com/resources/publications.

13 Professional development and training

Pearson supports UK and international customers with training related to our qualifications. This support is available through a choice of training options offered on our website: www.edexcel.com/resources/Training.

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 at: www.edexcel.com/resources/Training. 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.

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 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: www.edexcel.com/contactus

Support services

Face-to-face support: our team of Regional Quality Managers, based around the country, are responsible for providing quality assurance support and guidance to anyone managing and delivering Competence-based qualifications. The Regional Quality Managers can support you at all stages of the standard verification process as well as in finding resolutions of actions and recommendations as required. A UK map showing the Regional Quality Managers' contact details can be found at www.btec.co.uk/support.

Online support: find the answers to your questions by browsing over 100 FAQs on our website or by submitting a query using our Work Based Learning Ask the Expert Service. You can search the database of commonly asked questions relating to all aspects of our qualifications in the work-based learning market. If you are unable to find the information you need, send us your query and our qualification or administrative experts will get back to you. The Ask the Expert service is available at www.pearsonwbl.edexcel.com/Our-support.

Online forum

Pearson Work Based Learning Communities is an online forum where employers, further education colleges and workplace training providers are able to seek advice and clarification about any aspect of our qualifications and services, as well as share knowledge and information with others. The forums are sector specific and cover Business Administration, Customer Service, Health and Social Care, Hospitality and Catering and Retail. The online forum is available at www.pearsonwbl.edexcel.com/Our-support.

14 Contact us

We have a dedicated Account Support team, based throughout the UK, to give you more personalised support and advice. To contact your Account Specialist you can use any of the following methods:

Email: wblcustomerservices@pearson.com
Telephone: 0844 576 0045

If you are new to Pearson and would like to become an approved centre, please contact us at:

Email: wbl@pearson.com
Telephone:0844 576 0045

Complaints and feedback

We are working hard to provide you with excellent service. However, if any element of our service falls below your expectations, we want to understand why, so that we can prevent it from happening again. We will do all that we can to put things right.

If you would like to register a complaint with us, please email wblcomplaints@pearson.com.

We will formally acknowledge your complaint within two working days of receipt and provide a full response within seven working days.

15 Annexe A: e-skills UK Assessment requirements/strategy

Diplomas for Information Technology and Telecommunications Professionals at SCQF Levels 5, 6 and 8

Table of contents

Assessment guidance

Competence qualifications are first and foremost about what people can do. They go beyond technical skills to include planning, problem solving, dealing with unexpected occurrences, working with other people and applying the knowledge and understanding that underpins overall competence.

Historically SVQs in Scotland were the qualifications which attested to competence in the workplace. However, for a variety of reasons, these have been perceived as inappropriate for the IT and Telecoms sector. The introduction of CBQs (Competence Based Qualifications) in Scotland offers increased flexibility in the way professional competence can be assessed and demonstrated.

Assessment requirements for IT and Telecom qualifications

1. **Standardisation of assessment methodology across centres**

    a. Awarding organisations are required to make sure their recognised assessment centres understand how learners are to be assessed.

2. **Unit assessment**

    Unless otherwise specified (see 3 below) all units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met.

3. **Real work activities**

    a. Learners must complete real work activities for units in Option Group A above in order to produce evidence to demonstrate they are occupationally competent.

    b. Simulation is an allowed assessment method for all units not specified under *a.* above.

    c. Simulation is also allowed for aspects of units specified in a. above when:

    - a learner is required to complete a work activity that does not occur on a regular basis and therefore opportunities to complete a particular work activity do not easily arise

    - a learner is required to respond to a situation that rarely occurs, such as responding to an emergency situation

    - the safety of a learner, other individuals and/or resources will be put at risk.

    d. When simulation is used, assessors must be confident that the simulation replicates the workplace to such an extent that learners will be able to fully transfer their occupational competence to the workplace and real situations.

4. **Assessment**

    a. Assessors must be competent in the areas they are assessing i.e. have sufficient and relevant technical/occupational competence in the unit, at or above the level of the unit being assessed

    b. Assessors must be fully conversant with the unit(s) against which the assessments are to be undertaken.

    c. Assessment of real work or simulation must be to recognised standards.

Quality assurance requirements

1. Awarding bodies are required to make sure their recognised assessment centres understand how the qualification will be quality assured.

2. Quality control and assurance

    a. IT and Telecom professional CBQs must be verified:

        - internally by an internal verifier, who is accountable to the assessment centre; and

        - externally by a verifier or moderator[1], who is accountable to the awarding body or an agent of the awarding body.

    b. internal verifiers must:

        - have sufficient and relevant technical/occupational familiarity in the unit(s) being verified;

        - be fully conversant with the standards and assessment criteria in the units to be assessed; and

        - understand the awarding organisation's quality assurance systems and requirements for this qualification.

    c. external verifiers and moderators must:

        - hold or be working towards a suitable external verification qualification to confirm they understand and are able to carry out external verification; for moderators only this may be replaced by evidence of appropriate experience and training;

        - have no connections with the assessment centre, in order to maintain objectivity;

        - have sufficient and relevant technical/occupational understanding in the unit(s) being verified;

        - be fully conversant with the standards and performance criteria in the units to be assessed; and

        - understand the awarding organisation's quality assurance systems for this qualification.

    d. Trainee external verifiers must have a plan, which is overseen by the awarding organisation, to achieve the external verifier qualification within an agreed timescale.

3. Awarding organisations must decide the frequency and type of external monitoring (including verification or moderation where required under 2 above) activities. Any decision must be based on:

    - the risks associated with a qualification that is designed to help a learner demonstrate occupational competence; and

    - an evaluation of the centre's performance and past record.

4. Awarding organisations will have in place suitably constituted audit processes. For CBQs these should make use of any quality assurance and monitoring systems that already exist in workplace assessment environments.

---

[1] Verification involves visiting the candidate's assessment location; moderation takes place at the awarding organisation's location.

Awarding body support

The following awarding bodies have been involved in the development of the qualifications and have indicated their intention to offer them:

- Scottish Qualifications Authority
- Pearson Education Ltd
- Education Developments International
- City and Guilds.

Employer support

The following employers/training organisations are members of the steering group for the development and have indicated their support for the development:

- BT
- HP
- IBM
- Motherwell College
- PD Solutions
- QA
- Youtrain
- Microsoft
- Capgemini.