2231-05 Diploma for Information Technology and Telecommunications Professionals at SCQF Level 8

February 2018 Version 1.2





Qualification at a glance

Subject area	Information Technology and Telecommunications Professionals
City & Guilds number	2231
Age group approved	16+
Assessment	Portfolio and assignment
Centre Approval	Automatic approval available
Support materials	Centre handbook
	Unit packs
	Assignments
Registration and certification	Consult the Walled Garden/Online Catalogue for last dates

Title and level	City & Guilds number	Accreditation number
Diploma for Information Technology and Telecommunications Professionals at SCQF Level 8	2231-05	R417 04

Version and date	Change detail	Section
1.1 Sep 2015	Credit value for unit 449 amended	units
1.2 Feb 2018	Amended Quality Assurance Requirements	Appendix 2 Sources of general information



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1 Introduction



This document tells you what you need to do to deliver the qualification:

Area	Description		
Who is the qualification for?	This qualification is for learners who work or want to work as apprentices in the IT and Telecoms Sector		
What does the qualification cover?	It allows candidates to learn, develop and practise the skills required for employment and/or career progression in the ICT sector as Database Administrators, Internet/Web Professionals, IT Product Developers, IT Technical Sales Specialist, IT Trainers, Multimedia Designers, Network Managers, Office Equipment Service Technicians, Software Developer/Programmers, Systems Analysts and Telecommunications Technicians.		
Is the qualification part of a framework or initiative?	It serves as a technical certificate, in the Scottish Apprenticeship framework.		
Who did we develop the qualification with?	It was developed in association with e Skills, the sector skills council for business and information technology and other awarding organisations as well as providers and industry		
What opportunities for progression are there?	It allows candidates to progress into employment or to the following City & Guilds qualifications: • Level 4 Diploma for ICT Professionals - Systems and Principles • Level 4 Diploma in ICT Professional Competence		
	 Level 4 Diploma in ICT Professional Competence 		

Structure

To achieve the Diploma for Information Technology and Telecommunications Professionals at SCQF level 8, learners must achieve **150** credits overall.

16 credits from (001, 401)

a minimum of 12 credits from (402, 403)

a minimum of 47 credits from ((104 or 204 or 404), (105 or 205 or 305), (306 or 406), (107, 207, 407), (108, 208, 408), (109 or 209 or 409), (110 or 210 or 410), (111 or 211 or 411), (112 or 212 or 312), (113 or 213 or 313), 214, (115 or 315 or 415), (116 or 316 or 416), (117, 217, 417)

and a maximum of 12 credits from ((028 or 128 or 228), (029 or 129 or 229), (030 or 130 or 230), (031 or 131), (032 or 132), (033 or 133), (034 or 134 or 234), (035 or 135 or 235), (036 or 136 or 236), (037 or 137 or 237), (038 or 138 or 238), (039 or 139 or 239), (040 or 140 or 240), (041 or 141 or 241), (042 or 142 or 242), (043 or 143 or 243), (044 or 144 or 244), (045 or 145 or 245), (046 or 146 or 246), (047 or 147 or 247), (048 or 148 or 248))

Learners can achieve credits from the following units (118 or 218), (119 or 219), (120 or 220), (121 or 221 or 321), (122 or 222 or 322), 123, 224, (125 or 225), (126 or 226), 227,449

90 credits must be at SCQF Level 8

Diploma for Information Technology & Telecommunications Professionals at SCQF Level 8

	City & Guilds unit number	Unit title	Credit value	Excluded combination of units (if any)	Assessment Method
Group	Mandatory				
M	001	Health and Safety in IT and Telecoms	1		Portfolio
М	401	Personal effectiveness 3	15		Portfolio
M	402	Interpersonal and written communication 3	12	403	Portfolio
M	403	Customer care in IT and Telecoms 3	12	402	Portfolio

Group Optional

A	104	IT and Telecom system operation	9	204 and 404	Portfolio
A	105	IT & Telecom system management 1	7	205 and 305	Portfolio
A	107	Event driven computer programming 1	8	207 and 407	Portfolio
А	108	Object oriented computer programming 1	8	208 and 408	Portfolio
A	109	Procedural programming 1	8	209 and 409	Portfolio
A	110	Investigating and defining customer requirements for IT and Telecoms systems 1	9	210 and 410	Portfolio
A	111	Remote support for IT and Telecoms products or services 1	6	211 and 411	Portfolio
A	112	IT and Telecoms fault diagnosis 1	6	212 and 312	Portfolio
А	113	Testing IT and Telecoms systems 1	6	213 and 313	Portfolio
A	115	IT and Telecoms system security 1	4	315 and 415	Portfolio
A	116	Technical advice and guidance 1	4	316 and 416	Portfolio
A	117	Working with IT and Telecoms hardware and equipment 1	7	217 and 417	Portfolio
А	204	IT & Telecom system operation	12	104 and 404	Portfolio
А	205	IT and Telecom system management 2	12	105 and 305	Portfolio
A	207	Event driven computer programming 2	12	107 and 407	Assignment
A	208	Object oriented computer programming 2	12	108 and 408	Assignment
A	209	Procedural programming 2	12	109 and 409	Assignment
A	210	Investigating and defining customer requirements for IT and Telecoms systems 2	12	110 and 410	Portfolio

Α	211	Remote support for IT and Telecoms products or services 2	9	111 and 411	Portfolio
A	212	IT and Telecoms fault diagnosis 2	8	112 and 312	Assignment
A	213	Testing IT and Telecoms systems 2	12	113 and 313	Assignment
A	214	User profile administration	3		Portfolio
А	217	Working with IT and Telecoms hardware and equipment 2	10	117 and 417	Portfolio
A	305	IT and Telecom System Management 3	15	105 and 205	
A	306	Managing software development 1	15	406	Portfolio
A	312	IT and Telecoms fault diagnosis 3	12	112 and 212	Portfolio
A	313	Testing IT and Telecoms systems 3	15	113 and 213	Assignment
A	315	IT and Telecoms system security 2	8	115 and 415	Portfolio
A	316	Technical advice and guidance 2	7	116 and 416	Portfolio
A	404	IT and Telecom system operation	14	104 and 204	Portfolio
A	406	Managing software development 2	20	306	Portfolio
A	407	Event driven computer programming 3	20	107 and 207	Assignment
A	408	Object oriented computer programming 3	20	108 and 208	Assignment
A	409	Procedural programming 3	20	109 and 209	Assignment
A	410	Investigating and defining customer requirements for IT and Telecoms systems 3	15	110 and 210	Assignment
A	411	Remote support for IT and Telecoms products or services 3	12	111 and 211	Portfolio
A	415	IT and Telecoms system security 3	12	115 and 215	Portfolio
A	416	Technical advice and guidance 3	12	116 and 216	Portfolio

А	417	Working with IT and Telecoms hardware and equipment 3	14	117 and 217	Portfolio
В	118	Data representation and manipulation for IT and Telecoms 1	8	218	Assignment
В	119	Data modelling 1	4	219	Portfolio
В	120	Computer games development 1	4	220	Portfolio
В	121	System architecture 1	6	221 and 321	Assignment
В	122	Web development 1	3	222 and 322	Assignment
В	123	Introduction to IT and Telecoms systems development	6		Assignment
В	125	Networking principles 1	6	225	Assignment
В	126	Telecommunications principles 1	7	226	Assignment
В	218	Data representation and manipulation for IT and Telecoms 1	8	118	Portfolio
В	219	Data modelling 2	6	119	Assignment
В	220	Computer games development 2	7	120	Assignment
В	221	System architecture 2	8	121 and 321	Assignment
В	222	Web development 2	12	122 and 322	Assignment
В	224	Software design fundamentals	8		Assignment
В	225	Networking principles 2	10	125	Assignment
В	226	Telecommunications principles 2	10	126	Assignment
В	227	Fibre telecommunications techniques	15		Assignment
В	321	System architecture 3	8	121 and 221	Assignment
В	322	Web development 3	15	122 and 222	Assignment
С	028	Using the internet 1	3	128 and 228	Assignment
С	029	Using email 1	2	129 and 229	Assignment
С	030	Using collaborative technologies 1	3	130 and 230	Assignment
С	031	Using mobile IT devices 1	2	131	Assignment

С	032	Personal information management software	2	132	Assignment
С	033	IT software fundamentals 1	3	133	Assignment
C	034	Audio software 1	2	134 and 234	Assignment
С	035	Video software 1	2	135 and 235	Assignment
C	036	Database software 1	3	136 and 236	Assignment
С	037	Design software 1	3	137 and 237	Assignment
С	038	Imaging software 1	3	138 and 238	Assignment
С	039	Desktop publishing software 1	3	139 and 239	Assignment
С	040	Drawing and planning software 1	2	140 and 240	Assignment
С	041	Multimedia software 1	3	141 and 241	Assignment
С	042	Presentation software 1	3	142 and 242	Assignment
С	043	Project management software 1	3	143 and 243	Assignment
С	044	Bespoke software 1	2	144 and 244	Assignment
С	045	Specialist software 1	2	145 and 245	Assignment
С	046	Spreadsheet software 1	3	146 and 246	Assignment
С	047	Website software 1	3	147 and 247	Assignment
С	048	Word processing software 1	3	148 and 248	Assignment
С	128	Using the internet 2	4	028 and 228	Assignment
С	129	Using email 2	3	029 and 229	Assignment
С	130	Using collaborative technologies 2	4	030 and 230	Assignment
С	131	Using mobile IT devices 2	2	131	Assignment
С	132	Personal information management software	2	132	Assignment
С	133	IT software fundamentals 2	3	033	Assignment
С	134	Audio software 2	3	034 and 234	Assignment
С	135	Video software 2	3	035 and 235	Assignment
С	136	Database software 2	4	036 and 236	Assignment
С	137	Design software 2	4	037 and 237	Assignment
С	138	Imaging software 2	4	038 and 238	Assignment
С	139	Desktop publishing software 2	4	039 and 239	Assignment
С	140	Drawing and planning software 2	3	040 and 240	Assignment

С	141	Multimedia software 2	4	041 and 241	Assignment
С	142	Presentation software 2	4	042 and 242	Assignment
С	143	Project management software 2	4	043 and 243	Assignment
С	144	Bespoke software 2	3	044 and 244	Assignment
С	145	Specialist software 2	3	045 and 245	Portfolio
С	146	Spreadsheet software 2	4	046 and 246	Portfolio
С	147	Website software 2	4	047 and 247	Assignment
С	148	Word processing software 2	4	048 and 248	Assignment
С	228	Using the internet 3	5	028 and 128	Assignment
С	229	Using email 3	3	029 and 129	Assignment
С	230	Using collaborative technologies 3	6	030 and 130	Assignment
С	234	Audio software 3	4	034 and 134	Assignment
С	235	Video software 3	4	035 and 135	Assignment
С	236	Database software 3	6	036 and 136	Assignment
С	237	Design software 3	5	037 and 137	Assignment
С	238	Imaging software 3	5	038 and 138	Assignment
С	239	Desktop publishing software 3	5	039 and 139	Assignment
С	240	Drawing and planning software 3	4	040 and 140	Assignment
С	241	Multimedia software 3	6	041 and 141	Assignment
С	242	Presentation software 3	6	042 and 142	Assignment
С	243	Project management software 3	5	043 and 143	Assignment
С	244	Bespoke software 3	4	044 and 144	Portfolio
С	245	Specialist software 3	4	045 and 145	Portfolio
С	246	Spreadsheet software 3	6	046 and 146	Assignment
С	247	Website software 3	5	047 and 147	Assignment
С	248	Word processing software 3	6	048 and 148	Assignment
D	449	Project Management	15		Portfolio



2 Centre requirements

Approval

To offer this qualification, new centres will need to gain both centre and qualification approval. Please refer to the Centre Manual - Supporting Customer Excellence for further information.

Centre staff should familiarise themselves with the structure, content and assessment requirements of the qualification before designing a course programme.

Resource requirements

Physical resources and site agreements

Centres can use specially designated areas within a centre to assess, for example, the installation of specialised systems, setting up of networks and operating systems. The equipment and systems must meet industrial standards and be capable of being used under normal working conditions.

Centre staffing

Staff delivering this qualification must be able to demonstrate that they meet the following occupational expertise requirements:

- be occupationally knowledgeable in the area for which they are delivering training. This knowledge must be at least to the same level as the training being delivered.
- have credible experience of providing training
- have at least recent relevant experience in the specific area they will be assessing
- have any relevant qualifications required to deliver in the post 16 education market.

Centre staff may undertake more than one role, eg tutor and assessor or internal quality assurer, but cannot internally verify their own assessments.

Assessors and Internal Quality Assurer

The assessor will be responsible for making assessment judgements including for units where evidence relies extensively on expert witness testimony. The assessor will make use of appropriate expert witness testimony as part of the overall assessment of the learner. In addition the assessor must ensure that witness testimony clearly matches the level and breadth of performance described in the NOS, and this may be done, for example, by the assessor questioning the witness against the knowledge and skills specified in the NOS. In addition to the requirements of the regulatory authorities, assessors must:

- •have carried out continued professional development to familiarise themselves with current standards for assessment; and
 - •have relevant (IT, CT or CC) experience and occupational competence to enable them to make a valid judgement about demonstration of competence in the area they will be assessing.

Internal Quality Assurer

Internal quality assurer will be appointed by approved centres to ensure the quality and consistency of assessments within the centre.

In addition to the requirements of the regulatory authorities, Internal quality assurer must have the relevant (IT, CT or CC) experience and occupational competence to enable them to make a valid judgement about a demonstration of competence in the area they will be verifying.

Continuing professional development (CPD)

Centres must support their staff to ensure that they have current knowledge of the occupational area, that delivery, mentoring, training, assessment and verification is in line with best practice, and that it takes account of any national or legislative developments.

Candidate entry requirements

City & Guilds does not set entry requirements for this qualification. However, centres must ensure that candidates have the potential and opportunity to gain the qualification successfully.

As part of the assessment for this qualification, candidates must have access to a work setting/placement.

Age restrictions

City & Guilds cannot accept any registrations for candidates under 16 as this qualification is not approved for under 16s.

3 Delivering the qualification



Initial assessment and induction

An initial assessment of each candidate should be made before the start of their programme to identify:

- if the candidate has any specific training needs,
- support and guidance they may need when working towards their qualification.
- any units they have already completed, or credit they have accumulated which is relevant to the qualification.
- the appropriate type and level of qualification.

We recommend that centres provide an induction programme so the learner fully understands the requirements of the qualification, their responsibilities as a learner, and the responsibilities of the centre. This information can be recorded on a learning contract.

Support materials

The following resources are available for this qualification:

Description	How to access		
Assignments	www.cityandguilds.com		
Fast track approval forms	www.cityandguilds.com		
Unit packs	www.cityandguilds.com		

Recording documents

Learners and centres may decide to use a paper-based or electronic method of recording evidence.

City & Guilds endorses several ePortfolio systems, including our own, **Learning Assistant**, an easy-to-use and secure online tool to support and evidence learners' progress towards achieving qualifications. Further details are available at: **www.cityandguilds.com/eportfolios**.



4 Assessment

Assessment of the qualification

Learners must successfully complete one assignment or have a completed portfolio of evidence for each unit. Please refer to the table on page 5 for information on assessment methods for each unit.

Time constraints

Please see the individual assignments for time constraints.

Assessment strategy

Learners will be assessed by the method indicated against the unit in the table on page 5. For the units in Group A, Learners must complete real work activities in order to produce evidence to demonstrate they are occupationally competent. However, simulation is allowed for the units in Group A 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.

For all other units simulation is an allowed assessment method.

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. Assessment of real work or simulation must be to recognised standards

Recognition of prior learning (RPL)

 The City & Guilds policy on RPL can be found at: http://www.cityandguilds.com/Provide-Training/Centre-Support/Centre-Document-Library/Policies-and-Procedures/Quality-Assurance-Documents



5 Units

Structure of units

The units each have the following:

- City & Guilds reference number
- SQA Accreditation number
- title
- level
- credit value
- unit aim
- learning outcomes which are comprised of a number of assessment criteria
- notes for guidance.

You will find the units in separate unit handbooks on our website, separated by the group under SCQF 6. The Mandatory units for this qualification are on the following pages as is unit 449.

Unit 001 Health and safety in IT and Telecoms

Accreditation number:	UC29 04				
Level:	SCQF 4				
Credit value:	1				
Relationship to NOS:	This unit is based on the e-skills UK NOS for IT professionals (PROCOM) available from www.e-skills.com/nos				
Endorsement by a sector or regulatory body:	This unit is endorsed by e-skills				
Aim:	This unit is designed to ensure candidates are aware of, and follow the Health and Safety procedures that are in place within their workplace and applicable to their job role. Candidates will explore the various sources of information on Health and Safety available to them.				

Learning outcome

The learner will:

1. Comply with relevant Health and Safety procedures

Assessment criteria

- 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.

Unit 001 Health and safety in IT and Telecoms

Supporting information

Guidance

This unit must be assessed in the workplace.

Further guidance is set out in the CBQ Assessment principles developed by e-skills UK and agreed by the Joint Awarding Body Forum

Unit 401 Personal effectiveness 3

Accreditation number:	H39F 04						
Level:	SCQF 8						
Credit value:	15						
Relationship to NOS:	This unit is based on the e-skills UK NOS for IT professionals (PROCOM) available from www.e-skills.com/nos						
Endorsement by a sector or regulatory body:	This unit is endorsed by e-skills						

Learning outcome

The learner will:

1. Develop own personal and professional skills

Assessment criteria

The learner can:

- 1.1 analyse own development needs and the activities needed to meet them
- 1.2 seek and interpret feedback from others on performance
- 1.3 set and agree career and personal goals
- 1.4 manage own personal/professional development activities in order to achieve career and personal goals.
- 1.5 reflect critically on own development

Learning outcome

The learner will:

2. Work as a member of a team to achieve defined goals and implement agreed plans.

Assessment criteria

- 2.1 effectively plan and manage own and others 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 review the responsibilities, interests and concerns of colleagues to reduce obstacles to effective teamwork
- 2.5 resolve obstacles to effective teamwork

Learning outcome

The learner will:

3. Understand what is meant by professional practice

Assessment criteria

The learner can:

- 3.1 interpret the implications for IT and Telecoms professionals of:
 - a) Data Protection Act
 - b) Computer Misuse Act
 - c) Communications Act
 - d) Telecommunications (Lawful Business Practice) (Interception of Communications) Regulations
- 3.2 describe the role of professional bodies for IT and Telecoms, and the benefits of membership to individuals and organisations
- 3.3 explain the importance of quality management systems and standards for systems development.

Learning outcome

The learner will:

4. Understand the ethical and legislative environment relating to IT activities

Assessment criteria

The learner can:

- 4.1 Describe the types of conflicts of interest which can arise for IT or Telecoms professionals
- 4.2 Evaluate the impact on an IT or Telecoms organisation of legislation covering:
 - a) Processing of financial transactions
 - b) Health and Safety
 - c) Privacy, Confidentiality and Security
 - d) Copyright and Intellectual Property Rights

Learning outcome

The learner will:

5. Improve organisational effectiveness

Assessment criteria

- 5.1 interpret the aims and objectives of the organisation
- 5.2 describe the organisation's brand or image and how it can be promoted
- 5.3 describe the organisation's structure, roles and responsibilities
- 5.4 evaluate potential improvements to organisational effectiveness.

Unit 401 Personal effectiveness 3

Supporting information

Guidance

This unit must be assessed in the workplace.

Further guidance is set out in the CBQ Assessment principles developed by e-skills UK and agreed by the Joint Awarding Body Forum.

Unit 402 Interpersonal and written communications 3

Accreditation number:	H39K 04						
Level:	SCQF 8						
Credit value:	12						
Relationship to NOS:	This unit is based on the e-skills UK NOS for IT professionals (PROCOM) available from www.e-skills.com/nos						
Endorsement by a sector or regulatory body:	This unit is endorsed by e-skills						
Aim:	The aim of this unit is to teach the learner how to communicate effectively both in writing and verbally. The unit will help the learner to understand how to correctly verbalise what needs to be said, by using different tones and intonation. This unit will also help the learner to listen to what people have to say through techniques such as active listening. This unit will help the learner to effectively communicate in writing by looking at the way they structure their text. The unit will teach them the importance of using the correct grammar and spelling, as well as structuring their texts in certain ways.						

Learning outcome

The learner will:

1. Understand and evaluate interpersonal communication techniques

Assessment criteria

- 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 outcome

The learner will:

2. Be able to communicate interpersonally

Assessment criteria

The learner can:

- 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

Learning outcome

The learner will:

3. Understand techniques for communicating in writing

Assessment criteria

The learner can:

- 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 outcome

The learner will:

4. Be able to communicate and interpret complex information in writing

Assessment criteria

- 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

Unit 402 Interpersonal and written communication 3

Supporting information

Guidance

Learning Outcomes 2 and 4 must be assessed in the workplace. Further guidance is set out in the CBQ Assessment principles developed by e-skills UK and agreed by the Joint Awarding Body Forum.

Unit 403 Customer care for IT and Telecoms Professionals 3

Accreditation number:	H39N 04
Level:	SCQF 8
Credit value:	12
Relationship to NOS:	This unit is based on the e-skills UK NOS for IT professionals (PROCOM) available from www.e-skills.com/nos
Endorsement by a sector or regulatory body:	This unit is endorsed by e-skills

Learning outcome

The learner will:

1. Evaluate the importance of customer care for IT and Telecoms Professionals

Assessment criteria

The learner can:

- 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

Learning outcome

The learner will:

2. Develop professional customer relationships

Assessment criteria

- 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 outcome

The learner will:

3. Improve the delivery of service

Assessment criteria

- 3.1 evaluate the implications of customer satisfaction on the organisation.
- 3.2 evaluate methods for measuring customer satisfaction levels
- 3.3 analyse and report on customer satisfaction information with recommendations for improving satisfaction levels

Unit 403 Customer care in IT and Telecoms 3

Supporting information

Guidance

This unit must be assessed in the workplace.

Further guidance is set out in the CBQ Assessment principles developed by e-skills UK and agreed by the Joint Awarding Body Forum.

Unit 449 Project Management

Accreditation number:	UG41 04					
Level:	SCQF 8					
Credit value:	15					
GLH:	152					
Aim:	The purpose of this unit is to provide learners with an understanding of the principles of project management and how projects are set up. Learners will gain an understanding of how to mitigate for risks and develop their skills in using management tools for monitoring and reviewing projects.					

Learning outcome

The learner will:

1. Understand why organisations use project management

Assessment criteria

The learner can:

- 1.1Describe the **principles** of project management
- 1.2Explain the **benefits** of project management to organisations and individuals.

Range

Principles

Business justification, learning from experience, defined roles and responsibilities, manage by stages, manage by exception, focus on products, objectives, constraints, lifecycle.

Benefits

Possible benefits will include: Increased efficiency, improved customer satisfaction, organisations may be more effective in delivering services, improvements in quality and output, development opportunities within the project team, increase in an organisation's competitive edge, opportunities to expand services, more flexibility, improved risk assessment.

Learning outcome

The learner will:

2. Understand how to set up projects

Assessment criteria

The learner can:

- 2.1 Explain the **considerations** when reviewing project proposals
- 2.2 Explain how to set clear goals for projects
- 2.3 Analyse project resource requirements
- 2.4 Explain **how roles and responsibilities are allocated** within project teams
- 2.5 Identify project communication needs
- 2.6 Assess **possible risks** to successful completion of projects
- 2.7 Explain how to **mitigate** for possible risks

Range

Considerations

Financial viability of the project, time, legal, resource, budget, constraints, dependencies, confidentiality e.g. restrictions in relation to the Data Protection Act, who has access to data and project documentation.

How to set clear goals

Identify stakeholders, identify needs, use SMART principles, record goals in project plans

Resource requirements

Project requirements against goals, time constraints, budget, human resources, training needs, communication needs, IT requirements.

How roles and responsibilities are allocated

Use of experts from different areas of the organisation, use of key stakeholders, identify training needs, meeting schedules, timing of reports

Communication needs

Formal/informal communication, identifying who requires communication e.g. stakeholders, management, team members.

Possible risks

Safety issues, optimistic time and cost estimates, unexpected budget costs, unclear roles and responsibilities, stakeholder needs not sought, changing requirements after the start of the project, new requirements, poor communication, lack of commitment

Mitigation

Health and safety training, regular project review meetings, appropriate communication, training and monitoring.

Learning outcome

The learner will:

3. Be able to use management tools to maintain, control and monitor projects

Assessment criteria

The learner can:

- 3.1 Describe different **management tools** for monitoring and control of projects
- 3.2 Justify the use of management tools for monitoring and controlling projects
- 3.3 Use management tools to **monitor** projects

Range

Management tools

Progress reports, budget monitoring reports, GANTT charts, Critical Path Analysis, use of relevant and current project software packages.

Monitor

Updating task status, re-scheduling uncompleted tasks, updating project elements.

Learning outcome

The learner will:

4. Be able to review projects at all stages

Assessment criteria

The learner can:

- 4.1 Explain **reasons** for reviewing projects after completion
- 4.2 Review projects against original proposals

Range

Reasons

Improve future projects, enables ability to learn from experience, identify key resources for future projects, ensures comparison against achievements to original objectives, highlights any issues e.g. health and safety, problems, training needs, shortages in terms of resources, increases in costs, allows for the ability to revise and update plans, enables completion of an end of project report.

Appendix 1 Core Skill Signposting

The following diagram contains an overview of the signposting of the Mandatory (and selected Optional) Units to the Scottish Workplace Core Skills. In each case the number given is SCQF level of the Core Skill evidenced.

A green background (and bold number) indicates that unit assessment will normally also generate evidence to meet the relevant Workplace Core Skill Task (T1 etc) in full.

A yellow background (and bold italic number) indicates that unit assessment may also generate evidence to meet the relevant Task. However this will depend on the context of the assessment and may not provide full coverage.

An orange background (and italic number) indicates the unit assessment will not normally provide evidence for the relevant Task. However some evidence may be generated by particular contexts or by minor extensions to the normal unit assessment.

			Core Skill															
			Communication		Numeracy				Information and Communication Technology				Problem Solving			Working with Others		
			T1	T2	Т3	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	Т3	T1	T2
	CBQ Unit family	Unit No	11	12	13	11	12	13	14	11	12	13	14	11	12	13	11	12
	Daniel Effections	PE1 PE2		4	4 5		_			5						4 4		
	Personal Effectiveness	PE3		5	6 6					6						5 5 6 6		
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νο		IWC1		5	5 5	5		I		5	5	5	5		Т	1	Π	
dat	Interpersonal and written	IWC2		6	6 6					6	6	6				1		
Mandatory	communications	IWC3	(6	6 6	5				6	6	6	6	5				
-																		
	Customer Care for IT and	CC1			5 5					5	_	5	_		_			
	Telecoms Professionals	CC2			6 6					6	6	6			_			
<u> </u>		CC3		6	6 (<u> </u>				6	6	6	6	1	<u> </u>			
—		WHE1						4			_		_			4	1	_
	Working with IT & Telecoms	WHE2		4	4 4 5 5									5		4 4 5 5		5
	hardware and equipment	WHE3		6	6 6			_						6		6 6	_	
	1970E2																	
		TAG1	4	Į.	4 4	4	4	4	4	5	5	5		5 5	3	4 4		
	Technical Advice and Guidance	TAG2	5	5	5 5	5	5	5	5	6	6	6	-	6 6		5 5		
		TAG3	ϵ	5	6 6	6	6	6	6	6	6	6	(6 6		6 6		
52																		
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E	Procedural Programming	PP2			5 5									6 6		6 6		
Selected Optional Units		PP3		6	6 6	6	6	6	6	ь	6	6	1	6	1	6 6	5	5
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l bet	Object Oriented Programming	OOP2			5 5									5 6		6 6		4
8	8 ,	OOP3		6	6 6									5 6		6 6		
S																		
	Event Driven Programming	EDP1			4	4								5 5		5 5		
		EDP2		5	5 5									5 6		6 6		
		EDP3	(6	6 6	6	6	6	6	6	6	6	-	6	i	6 6	5	5
		TECTS		4	4					-						a .		
	Testing IT 9 Telesoms Sustams	TEST1 TEST2		4	5 5							_		5 4 6 5		4 4 5 5		
	Testing IT & Telecoms Systems	TEST3		6	6 6									5 5 6 6		6 6		
<u></u>	1	1013		0	0 (י ני	י פ	0	6	6	- 6	6		0 6	1	0 0	0	6

Appendix 2 Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to the **Centres and Training Providers homepage** on **www.cityandguilds.com**.

Centre Manual - Supporting Customer Excellence contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve 'approved centre' status, or to offer a particular qualification, as well as updates and good practice exemplars for City & Guilds assessment and policy issues. Specifically, the document includes sections on:

- The centre and qualification approval process
- Assessment, internal quality assurance and examination roles at the centre
- Registration and certification of learners
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Management systems
- Maintaining records
- Assessment
- Internal quality assurance
- External quality assurance.

Our Quality Assurance Requirements encompasses all of the relevant requirements of key regulatory documents such as:

 SQA Accreditation's Regulatory Principles, version 2, 1 December 2014

and sets out the criteria that centres should adhere to pre and post centre and qualification approval.

Access to Assessment and Qualifications provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for learners who are eligible for adjustments in assessment.

The **centre homepage** section of the City & Guilds website also contains useful information such on such things as:

- Walled Garden: how to register and certificate learners on line
- **Events**: dates and information on the latest Centre events
- **Online assessment**: how to register for e-assessments.

City & Guilds **Believe you can**



www.cityandguilds.com

Useful contacts

UK learners General qualification information	T: +44 (0)844 543 0033 E: learnersupport@cityandguilds.com						
International learners General qualification information	T: +44 (0)844 543 0033 F: +44 (0)20 7294 2413 E: intcg@cityandguilds.com						
Centres Exam entries, Certificates, Registrations/enrolment, Invoices, Missing or late exam materials, Nominal roll reports, Results	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: centresupport@cityandguilds.com						
Single subject qualifications Exam entries, Results, Certification, Missing or late exam materials, Incorrect exam papers, Forms request (BB, results entry), Exam date and time change	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 F: +44 (0)20 7294 2404 (BB forms) E: singlesubjects@cityandguilds.com						
International awards Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: intops@cityandguilds.com						
Walled Garden Re-issue of password or username, Technical problems, Entries, Results, e-assessment, Navigation, User/menu option, Problems	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: walledgarden@cityandguilds.com						
Employer Employer solutions, Mapping, Accreditation, Development Skills, Consultancy	T: +44 (0)121 503 8993 E: business@cityandguilds.com						
Publications Logbooks, Centre documents, Forms, Free literature	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413						

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As the UK's leading vocational education organisation, City & Guilds is leading the talent revolution by inspiring people to unlock their potential and develop their skills. We offer over 500 qualifications across 28 industries through 8500 centres worldwide and award around two million certificates every year. City & Guilds is recognised and respected by employers across the world as a sign of quality and exceptional training.

City & Guilds Group

The City & Guilds Group operates from three major hubs: London (servicing Europe, the Caribbean and Americas), Johannesburg (servicing Africa), and Singapore (servicing Asia, Australia and New Zealand). The Group also includes the Institute of Leadership & Management (management and leadership qualifications), City & Guilds Licence to Practice (land-based qualifications), the Centre for Skills Development (CSD works to improve the policy and practice of vocational education and training worldwide) and Learning Assistant (an online e-portfolio).

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