Level 3 Certificate in Utility Mapping and Surveying

Qualification Specification

Contents

Introduction

The Level 3 Certificate in Utility Mapping and Surveying is appropriate for those working in a surveying environment, for example, trainee surveyors or technicians or those entering the surveying profession. The units cover topics relating to the location and mapping of underground utilities and include colour coding of underground services, regulations and guidelines relating to the location of buried services, reading maps and drawings, carrying out surveys and reporting.

The qualification units cover provision of surveys meeting some of the requirements of a PAS128 Survey at Quality Levels D & C.

The awarding body for this qualification is ProQual Awarding Body and the regulatory body is the Office of Qualifications and Examinations Regulation (Ofqual). The specification for these qualifications has been approved by the Welsh Government for use by centres in Wales and by the Council for the Curriculum Examinations and Assessment (CCEA) for use by centres in Northern Ireland.

This qualification has been accredited onto the Regulated Qualifications Framework (RQF), and is a pre-requisite for progression to Level 5 and 6 qualifications in ProQual's Utility Mapping and Surveying qualifications suite.

Qualification Profile
Level 3 Certificate in Utility Mapping and Surveying

Qualification title	**ProQual Level 3 Certificate in Utility Mapping and Surveying**
Ofqual qualification number	600/4758/6
Level	Level 3
Total qualification time	200
Guided learning hours	130
Assessment	Pass or fail Internally assessed and verified by centre staff External quality assurance by ProQual verifiers
Qualification start date	1/3/12
Qualification end date	

Entry Requirements

There are no formal entry requirements for this qualification.

Centres should carry out an **initial assessment** of candidate skills and knowledge to identify any gaps and help plan the assessment.

Qualification Structure

Candidates must complete **2 Mandatory** units.

Mandatory Units			
Unit Reference Number	**Unit Title**	**Unit Level**	**GLH**
Y/507/1367	Utility identification/site reconnaissance	3	60
H/507/1369	Carry out desktop surveys and communicate findings	3	70

Centre Requirements

Centres must be approved to offer this qualification. If your centre is not approved please complete and submit form **ProQual Additional Qualification Approval Application**.

Staff
Staff delivering this qualification must be appropriately qualified and/or occupationally competent.

Assessors/Internal Quality Assurance
For each competence-based unit centres must be able to provide at least one assessor and one internal quality assurance verifier who are suitably qualified for the specific occupational area. Assessors and internal quality assurance verifiers for competence-based units or qualifications will normally need to hold appropriate assessor or quality assurance verifier qualifications, such as:

- Award in Assessing Competence in the Work Environment
- Award in Assessing Vocationally Related Achievement
- Certificate in Assessing Vocational Achievement
- Award in the Internal Quality Assurance of Assessment Processes and Practices
- Certificate in Leading the Internal Quality Assurance of Assessment Processes and Practices

Support for Candidates

Materials produced by centres to support candidates should:

- enable them to track their achievements as they progress through the learning outcomes and assessment criteria;
- provide information on where ProQual's policies and procedures can be viewed;
- provide a means of enabling Internal and External Quality Assurance staff to authenticate evidence

Assessment

Candidates must demonstrate the level of knowledge and competence described in the units.

Each candidate is required to produce evidence which demonstrates their achievement of all of the learning outcomes and assessment criteria for each unit.

Evidence can include:

- assignments/projects/reports
- worksheets
- portfolio of evidence
- record of oral and/or written questioning
- candidate test papers

Learning outcomes set out what a candidate is expected to know, understand or be able to do.

Assessment criteria specify the standard a candidate must meet to show the learning outcome has been achieved.

Learning outcomes and assessment criteria for this qualification can be found from page 8 onwards.

Internal Quality Assurance

An internal quality assurance verifier confirms that assessment decisions made in centres are made by competent and qualified assessors, that they are the result of sound and fair assessment practice and that they are recorded accurately and appropriately.

Adjustments to Assessment

Adjustments to standard assessment arrangements are made on the individual needs of candidates. ProQual's Reasonable Adjustments Policy and Special Consideration Policy sets out the steps to follow when implementing reasonable adjustments and special considerations and the service that ProQual provides for some of these arrangements.

Centres should contact ProQual for further information or queries about the contents of the policy.

Results Enquiries and Appeals

All enquiries relating to assessment or other decisions should be dealt with by centres, with reference to ProQual's Enquiries and Appeals Procedures.

Certification

Candidates who achieve the requirements for qualifications will be awarded:

- A certificate listing all units achieved, and
- A certificate giving the full qualification title -

  ProQual Level 3 Certificate in Utility Mapping and Surveying

Claiming certificates

Centres may claim certificates for candidates who have been registered with ProQual and who have successfully achieved the requirements for a qualification. All certificates will be issued to the centre for successful candidates.

Unit certificates

If a candidate does not achieve all of the units required for a qualification, the centre may claim a unit certificate for the candidate which will list all of the units achieved.

Replacement certificates

If a replacement certificate is required a request must be made to ProQual in writing. Replacement certificates are labelled as such and are only provided when the claim has been authenticated. Refer to the Fee Schedule for details of charges for replacement certificates.

Learning Outcomes and Assessment Criteria

Unit Y/507/1367
Utility identification/site reconnaissance

This unit is about identifying underground utilities, colour coding of buried utilities, regulations and guidelines relating to the location of buried utilities, reading maps and drawings.

This covers provision of surveys, meeting some of the requirements of a PAS128 Survey at Quality Levels D & C

Learning Outcome - The learner will:	Assessment Criterion - The learner can:
1 Be able to carry out reconnaissance surveys and understand appropriate codes for the identification and colour coding of buried utilities	1.1 Describe the application of a colour coding system for buried utilities with reference to existing specifications and guidance
	1.2 Explain the purpose of a colour coding system
	1.3 Explain what types of buried utilities are covered by the code
	1.4 Explain where these various buried utilities may be located
	1.5 Describe the various types of materials that buried utilities are made of and laid within
2 Be able to apply an appropriate and specific coding system during site reconnaissance	2.1 Using an appropriate and specific code, identify a range of service types
	2.2 Identify warning indicators and markers found on buried utilities
	2.3 Identify the types of detection methods and equipment which may be required to locate the identified buried utilities
3 Understand guidance which may detail prescribed depths at which buried utilities are buried and the limitations of this guidance	3.1 Explain the recommended depths at which various service types are buried according to recognised guidance
	3.2 Explain the advantages of specific regulations and guidelines in relation to the location and depth of buried utilities
	3.3 Describe why reliance on published information regarding the depth of buried services can cause problems in a site environment
4 Be able to determine from a site reconnaissance visit the presence of buried utilities	4.1 Identify an appropriate source which may be able to provide information regarding the type and location of buried utilities

Learning Outcome - The learner will:	Assessment Criterion - The learner can:
	4.2 Using local information identify on drawings/plans the service type
	4.3 Produce marked up drawings/plans applying appropriate colour coding
	4.4 Identify where information is incomplete and how to rectify
5 Understand and be able to read drawings/plans	5.1 Describe the various types of drawings/plans that may be used in buried utilities location and record keeping
	5.2 Explain what scale means in the production of drawings/plans
	5.3 Explain what checks are required to ensure the validity of data on drawings or utility plans
	5.4 Describe how to carry out checks and confirm that the data is complete
	5.5 Explain how to identify any information which is incomplete
	5.6 a) Apply appropriate scale of survey and deliverables b) Analyse the deliverables according to the published standards or specifications

Assessment

Candidates must produce documentary evidence against each of the assessment criteria. Where the work place evidence does not cover the whole range, knowledge evidence must be provided to cover the remaining items of the range for each relevant assessment criteria.

Unit H/507/1369
Carry out Desktop Surveys and communicate findings

This unit is about the compilation of desktop utility surveys, identifying what data is required, survey methods, communicating information and preparing survey drawings.

This covers provision of surveys, meeting some of the requirements of a PAS128 Survey at Quality Levels D & C.

Learning Outcome - The learner will:	Assessment Criterion - The learner can:
1 Be able to carry out the survey	1.1 Explain how to establish the purpose of the survey
	1.2 Explain what suitable sources of information are
	1.3 Ensure that information is collected using suitable methods that meet the requirements of the survey specification
	1.4 Analyse information or forward the information to others for analysis in line with recognised specifications
	1.5 Ensure that any information collected and recorded is in the format required
2 Be able to identify what data is required	2.1 Explain the need to collect information and the need to use suitable methods that meet the requirements of the survey specification
	2.2 Explain how to analyse information or why it is necessary to forward the information to others for analysis in line with specifications
	2.3 Explain how to collect and record all data fully in the format required
3 Be able to communicate information	3.1 Ensure that accurate and complete information is produced which contains the necessary supporting data
	3.2 Ensure that information is communicated in accordance with the survey specification and that requests for further clarification are responded to
4 Understand how to communicate information	4.1 Explain how to produce relevant and complete information which contains the necessary supporting data
	4.2 Explain how to communicate information in accordance with the survey specification and respond to requests for further clarification
5 Be able to prepare drawings using suitable software	5.1 Identify software applications and media which are suitable for preparing the drawings required
	5.2 Produce drawings which are fit for purpose and which are complete, accurate and comply with requirements
	5.3 Use standard drawing conventions, identify and justify any deviations from them

Learning Outcome - The learner will:	Assessment Criterion - The learner can:
	5.4 Identify any information to be included which is incomplete or inconsistent and make accurate amendments for quality assurance purposes
	5.5 Explain why it is necessary to keep registers and records of drawings which are complete, accurate and up-to-date
	5.6 Use methods for production and record keeping which are consistent with quality assurance procedures
6 Understand how to prepare drawings using suitable software	6.1 Explain how to produce drawings fit for purpose and which are complete, accurate and comply with client requirements
	6.2 Explain how to select software methods and media which are suitable for the drawings required
	6.3 Explain how to use standard drawing conventions, identify and justify any deviations from them
	6.4 Explain how to clarify any information to be included which is incomplete or inconsistent and make accurate amendments for quality assurance purposes
	6.5 Explain how to use methods for production and record keeping which are consistent with quality assurance procedures
	6.6 Describe how to obtain the necessary checks and approvals for the content and presentation of drawings

Assessment

Candidates must produce documentary evidence against each of the assessment criteria. Where the work place evidence does not cover the whole range, knowledge evidence must be provided to cover the remaining items of the range for each relevant assessment criteria.

ProQual Awarding Body
ProQual House
Annie Med Lane
South Cave
HU15 2HG

Tel: 01430 423822

www.proqualab.com

enquiries@proqualab.com