



Regulated Qualifications Unit and Assessment Specification

Unit title	Plan, Carry Out and Present Measured Surveys in Built Environment Design
Regulator unit code	R/616/7248
SQA unit code	H7RY 79
SSC Ref	COSBEDO04v2

History of changes

Publication date: August 2014

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Version number	Date	Description	Authorised by
02	July 2017	Unit Specification updated to reflect current Ofqual terminology	Qualifications Officer

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Regulated Qualifications Unit specification

Title	Plan, Carry Out and Present Measured Surveys in Built Environment Design	
Level	3	
Credit value	15	
Learning Outcomes		Assessment Criteria
The learner will:		The learner can:
1	Be able to prepare for measured surveys.	<p>1.1 Confirm the extent of the measured survey and the survey method before starting work.</p> <p>1.2 Arrange for suitable equipment, and enough spares for on site maintenance, to be brought to the site and kept safely and securely.</p> <p>1.3 Check and adjust equipment so that it is accurate before it is used for taking measurements.</p> <p>1.4 Brief the people who will be involved in the survey about the survey arrangements and the safety arrangements.</p> <p>1.5 Check and confirm that signs, arrangements for personal safety, equipment and site access conform to good practice, legislation and regulation.</p>
2	Understand how to prepare for measured surveys.	<p>2.1 Explain how to confirm the extent of the measured survey and the survey method before starting the work.</p> <p>2.2 Explain how to arrange for suitable equipment, and enough spares for on site maintenance, to be brought to the site and kept safely and securely.</p> <p>2.3 Explain how to check and adjust equipment.</p> <p>2.4 Explain how to brief the people who will be involved in the survey about survey arrangements and the safety arrangements.</p>

Learning Outcomes		Assessment Criteria	
The learner will:		The learner can:	
		2.5	Explain how to check and confirm that signs, arrangements for personal safety, equipment and site access conform to good practice, legislation and regulations.
3	Be able to carry out measured surveys.	3.1	Conform to safe working practices when on the site.
		3.2	Set accurate horizontal and vertical controls and record them.
		3.3	Take accurate observations and measurements using valid methods.
		3.4	Change work procedures and practices to allow for different circumstances and conditions.
		3.5	Record survey data clearly and accurately and store it securely for later analysis and inspection.
		3.6	Keep a clear and accurate record of the time spent on the survey and of any problems that arise.
		3.7	Maintain the equipment in operating condition and store it securely.
		3.8	Restore areas which have been opened up for access.
4	Understand how to carry out measured surveys.	4.1	Explain how to conform to safe working practices when on the site.
		4.2	Explain how to set and record accurate horizontal and vertical controls.
		4.3	Explain how to take accurate observations and measurements.
		4.4	Explain how to change work procedures and practices to allow for different circumstances and conditions.
		4.5	Explain how to record and store survey data.

Learning Outcomes The learner will:	Assessment Criteria The learner can:
	<p>4.6 Explain how to keep a clear and accurate record of the time spent on the survey and of any problems that arise.</p> <p>4.7 Explain how to maintain the equipment in operating condition and store securely.</p> <p>4.8 Explain how to restore areas which have been opened up for access.</p>
<p>5 Be able to analyse and present measured surveys.</p>	<p>5.1 Collect together enough survey information to allow an accurate analysis to be made.</p> <p>5.2 Check and verify the survey information.</p> <p>5.3 Analyse the survey information accurately.</p> <p>5.4 Present the survey information, the commentary and any support information accurately, clearly and in a format which is suitable for those who need to use it.</p> <p>5.5 Advise people who will be using the survey information on how to interpret it.</p>
<p>6 Understand how to analyse and present measured surveys.</p>	<p>6.1 Explain how to collect together enough survey information to allow an accurate analysis to be made.</p> <p>6.2 Explain how to check and verify the survey information.</p> <p>6.3 Examine how to analyse the survey information.</p> <p>6.4 Explain how to present the survey information, the commentary and any support information accurately, clearly and in a format which is suitable for those who need to use it.</p> <p>6.5 Propose how to advise people who will be using the survey information on how to interpret it.</p>

Additional information about the unit
Unit purpose and aim(s)
<p>This unit is concerned with carrying out measured surveys. This unit will test your mathematical knowledge and your competence with surveying instruments. It is about making the preparations — finding out what needs to be surveyed, obtaining the suitable equipment and the spares, and briefing affected parties beforehand about the work.</p> <p>You must know what the survey consists of, what equipment you will need, and who will need the results. It is about doing the survey work — accurately recording and calculating observations and measurements. You will need to produce clear and accurate records of your work, and of the time you spent doing it.</p> <p>It is about checking your survey records, and collating and presenting them to those who need them. You must be able to analyse your field surveys, and present a report to those who need it.</p>
Unit start date
01 August 2014
Details of the relationship between the unit and relevant national occupational standards (if appropriate)
The unit sets out the competence and knowledge specification for COSBEDO04 in Built Environment Design.
Details of the relationship between the unit and other standards or curricula (if appropriate)
N/A
Assessment requirements specified by a sector or regulatory body (if appropriate)
<p>The following ranges apply: Learning Outcomes 1 and 2</p> <ul style="list-style-type: none"> ◆ Method: <ul style="list-style-type: none"> — approximate measured — detailed measurement of all specified features ◆ Equipment: <ul style="list-style-type: none"> — mechanical — optical — electronic ◆ People <ul style="list-style-type: none"> — colleagues — external contractors — people and organisations who may be affected by the survey

Additional information about the unit (cont)

Assessment requirements specified by a sector or regulatory body (if appropriate) (cont)

- ◆ Survey arrangements:
 - risk assessment
 - survey responsibilities
 - details of the survey method
 - the site
 - the equipment
 - calibration certificates
- ◆ Safety:
 - personal safety
 - equipment and clothing
 - safe use of access equipment
 - health and safety practice and regulations
 - industry codes of practice
 - regulations applying to the survey site
 - signage
 - site access and working areas
 - traffic management
 - live services and equipment

Learning Outcomes 3 and 4

- ◆ Safe working practices:
 - personal safety
 - equipment and clothing
 - safe use of access equipment
 - health and safety practice and regulations
 - industry codes of practice
 - regulations applying to the survey site
 - signage
 - site access and working areas
 - traffic management
 - live services and equipment
- ◆ Circumstances and conditions:
 - climatic (variations, tolerances and environmental risks)
 - live conditions (eg buildings and sites in use, services, roads, railways, runways)
 - unforeseen circumstances
 - emergency circumstances
 - topography
 - water
 - obstacles
 - planned circumstances
 - security
- ◆ Equipment:
 - mechanical
 - optical
 - electronic

Additional information about the unit (cont)
Assessment requirements specified by a sector or regulatory body (if appropriate) (cont)
<p>Learning Outcomes 5 and 6</p> <ul style="list-style-type: none"> ◆ Survey information: <ul style="list-style-type: none"> — approximate measured — detailed measurement of all specified features — graphic ◆ Present: <ul style="list-style-type: none"> — orally — in writing — graphically — digitally <p>This unit must be assessed in a work environment, in accordance with:</p> <ul style="list-style-type: none"> ◆ the Additional Requirements for Qualifications using the title NVQ in QCF ◆ the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment <p>Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Endorsement of the unit by a sector or other appropriate body (if required)
CITB
Location of the unit within the subject/sector classification system
4.1 Engineering, 5.1 Architecture, 5.2 Building and Construction
Name of the organisation submitting the unit
CITB
Guided Learning Hours
80

Regulated Qualifications Assessment specification

Assessment (evidence) requirements

The evidence requirements for this unit are shown in the main body of the unit under the section titled 'Assessment requirements or guidance specified by a sector or regulatory body'.

Guidance on Methods/Instruments of Assessment

Occupational skills (OS) unit

This unit is designed to assess the skills of learners in the workplace. Observation of learner performance can only be carried out on-the-job and should always be the primary and preferred source of evidence of competent performance.

Collection of supplementary evidence of performance can be used to further substantiate, support and expand the evidence base for competent performance where this is necessary. This may arise in situations where evidence from direct observation of the learners on-the-job is deemed insufficient to fully meet the required standards. Supplementary evidence may include:

- ◆ witness testimony
- ◆ questioning
- ◆ professional discussion
- ◆ product and photographic evidence
- ◆ relevant active documentation, reports, presentations
- ◆ other valid evidence which relates directly to learner performance on-the-job

SQA's Guide to Assessment is designed to provide support for everyone who assesses for SQA qualifications. It looks at the principles of assessment, and brings together information on assessment in general as well as on best practice in assessment. The Guide to Assessment can be downloaded free from SQA's website www.sqa.org.uk.