SQA Advanced Unit Specification

General information for centres

Unit code-   HT7H 47

Superclass-   AG

Unit title-   **Project Management**

General competence for Unit: Using project management software to contribute to the management of large-scale projects.

Outcomes

1.   Establish organisational and individual factors influencing project development.

2.   Plan project development work.

3.   Schedule project development work using project management software.

4.   Use project management software to estimate aspects of project development.

Credit value: 1 SQA Credit

Access statement: There is no formal entry requirement for this Unit. However, it would be beneficial if the candidate had prior experience of using a computer system. This may be evidenced by the possession of relevant NC modules, SQA Advanced Units or practical experience.

This publication may be reproduced in whole or in part for educational purposes provided that no profit is derived from reproduction and that, if reproduced in part, the source is acknowledged.

SQA acknowledges the valuable contribution that Scotland's colleges have made to the development of SQA Advanced qualifications.

SQA Advanced Unit specification: statement of standards

Unit Code: HT7H 47

Unit title: Project Management

Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

Outcome 1

Establish organisational and individual factors influencing project development.

Performance criteria

(a) An appropriate management structure for project development is fully described
(b) The effects of project team organisation on development work are correctly identified and described
(c) Factors affecting productivity of individuals undertaking project development are clearly identified

Range statement

Range is fully expressed within the performance criteria.

Evidence Requirements

Written evidence that the candidate can establish factors as detailed in the performance criteria.

Outcome 2

Plan project development work.

Performance criteria

(a) Project milestones are established and described in unambiguous terms.
(b) Deliverables associated with project milestones are clearly specified.
(c) Essential subtasks required for project completion are clearly identified.
(d) All preliminary tasks to be completed prior to commencement of subtasks are listed.

(e)   Resource requirements for each task and duration for completion are realistically estimated.

Range statement

Resource: human; physical

Evidence Requirements

Performance evidence that the candidate can plan project development as detailed in the performance criteria. This should be demonstrated by project milestones, suitably described, and associated deliverables for PCs (a) and (b), essential subtasks and prerequisite tasks for PCs (c) and (d) and details of estimated resource requirements for PC (e).

Outcome 3

Schedule project development work using project management software.

Performance criteria

(a)   Package facilities are used effectively to produce an activity network from the task list.
(b)   Activity network accurately represents task interdependencies.
(c)   Network critical path and float time for each activity are determined correctly.
(d)   Schedule of tasks is achievable and is clearly and effectively displayed using appropriate package facilities.
(e)   Package facilities are used correctly to modify schedule in order to improve allocation of resources.

Range statement

Resources: human; physical

Evidence Requirements

Performance evidence that the candidate can use project management software to schedule project development. This should be provided by hardcopy output covering the performance criteria, supported by observation and checklist covering use of the project management software.

Outcome 4

> Use project management software to estimate aspects of project development.

Performance criteria

> (a)   Factors affecting cost of project development are fully identified.
> (b)   Estimation parameters are tailored to reflect the characteristics of particular project developments.
> (c)   Estimation models are applied correctly in estimating cost of project developments.
> (d)   Conclusions drawn from application of estimation methods are reported fully and are valid.

Range statement

Range is fully expressed within the performance criteria.

Evidence Requirements

Performance evidence that the candidate can use project management software to estimate project development costs as detailed in the performance criteria. This should be in written form for PCs (a) and (d) and hard copy output for PCs (b) and (c) supported by observation and checklist covering use of the software.

Assessment

In order to achieve this Unit, candidates are required to present sufficient evidence that they have met all the performance criteria for each Outcome within the range specified. Details of these requirements are given for each Outcome. The assessment instruments used should follow the general guidance offered by the SQA assessment model and an integrative approach to assessment is encouraged. (See references at the end of support notes).

Accurate records should be made of the assessment instruments used showing how evidence is generated for each Outcome and giving marking schemes and/or checklists, etc. Records of candidates' achievements should be kept. These records will be available for external verification.

Equality and inclusion

This Unit specification has been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners should be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence.

Further advice can be found on our website: www.sqa.org.uk/assessmentarrangements.

SQA Advanced Unit specification: support notes

Unit title: Project Management

This part of the Unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

Guidance on the content and context for this Unit

This Unit can be delivered in a wide range of contexts including engineering and computing. Wherever possible, aspects of the management of an actual project should be dealt with. This allows cross-assessment of the Outcomes with integrative or other project-based Units.

Achievement of the Outcomes will require access to a personal computer or workstation on an individual basis. Current versions of commercially available software should be used.

Approaches to generating evidence

A candidate-centred, resource-based learning approach is recommended. During the course of the Unit, candidates should have several opportunities to develop their practical skills and should be assessed at appropriate points. Concepts and terminology should be presented in context throughout the Unit.

Where the candidate is unsuccessful in achieving an Outcome, provision should be made for remediation and reassessment.

Assessment procedures

Centres may use the instruments of assessment which are considered by the tutor/trainer to be the most appropriate. Examples of instruments of assessment which could be used are: case studies, reports, practical exercises.

PROGRESSION

This Unit contributes towards SQA Advanced Certificates, SQA Advanced Diplomas and Professional Development Awards.