



Higher National Unit Specification

General information

Unit title: Facilities Management: Property, Fabric and Building Services Maintenance (SCQF level 8)

Unit code: HX5D 35

Superclass: VH

Publication date: January 2018

Source: Scottish Qualifications Authority

Version: 01

Unit purpose

This unit develops learner's knowledge and understanding of the maintenance implications associated with building structures and the services incorporated within these. Learners will gain skills in comparing, developing and analysing strategies for building use and the management of maintenance programmes within a range of facilities management contexts.

This unit is suited to learners who are working or seeking work in the field of facilities management and is part of the HND Facilities Management Group Award.

Outcomes

On successful completion of the unit the learner will be able to:

- 1 Evaluate the maintenance implications of building structures and the services incorporated within them.
- 2 Produce a fabric maintenance strategy and service plan.
- 3 Produce a maintenance strategy for building services incorporating the use of building management systems.

Credit points and level

1 Higher National Unit credit at SCQF level 8: (8 SCQF credit points at SCQF level 8)

Higher National Unit Specification: General information (cont)

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Recommended entry to the unit

Entry to this unit is at the discretion of the delivering centre; however it would be beneficial if the learner had prior experience of the facilities management industry. It is recommended that learners have some experience of studying Facilities Management at Higher National level and that they will already have achieved the HN Unit HL96 34 *Facilities Management: An Overview* and HN Unit DW51 34 *Building Maintenance Management*.

Core Skills

Opportunities to develop aspects of Core Skills are highlighted in the support notes for this unit specification.

There is no automatic certification of Core Skills or Core Skill components in this unit.

Context for delivery

If this unit is delivered as part of a group award, it is recommended that it should be taught and assessed within the subject area of the group award to which it contributes.

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.

Higher National Unit Specification: Statement of standards

Unit title: Facilities Management: Property, Fabric and Building Services Maintenance (SCQF level 8)

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

Where evidence for outcomes is assessed on a sample basis, the whole of the content listed in the knowledge and/or skills section must be taught and available for assessment. Learners should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

Outcome 1

Evaluate the maintenance implications of building structures and the services incorporated within them.

Knowledge and/or skills

- ◆ Variety of fabric and components used within building structures:
 - advantages and disadvantages
 - differences over time (old vs new)
 - implications of these on maintenance
- ◆ Building services:
 - range of services expected within buildings
 - mechanical and electrical services
 - cabling and IT services
 - methods to incorporate services into buildings
- ◆ Legal requirements, health and safety and hazardous materials

Outcome 2

Produce a fabric maintenance strategy and service plan.

Knowledge and/or skills

- ◆ Corrective, preventative and predictive maintenance strategies
- ◆ Approaches to delivering building maintenance including in-house and out-sourced
- ◆ Methods to monitor a building fabric maintenance programme

Higher National Unit Specification: Statement of standards (cont)

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Outcome 3

Produce a maintenance strategy for building services incorporating the use of building management systems.

Knowledge and/or skills

- ◆ Approaches to maintenance strategy for building services:
 - suitability and appropriateness of strategies in differing contexts
- ◆ Essential elements of a building services maintenance programme:
 - compliance with legislative requirements
- ◆ Effectiveness of a maintenance strategy for building services
- ◆ Building management systems including:
 - control technology
 - staffing and skills requirements

Evidence requirements for this unit

Learners will need to provide evidence to demonstrate their knowledge and/or skills across all outcomes by showing that they can:

For Outcome 1

- ◆ evaluate the fabric maintenance implications of a minimum of two different building structures.
- ◆ evaluate a range of services within a building and the effect of these services on building use and layout.
- ◆ explain the statutory requirements a building must comply with in order to be operational.

For Outcome 2

- ◆ produce a fabric maintenance strategy.
- ◆ produce a fabric maintenance service plan.
- ◆ evaluate the use of monitoring strategy to monitor a building fabric maintenance programme.

For Outcome 3

- ◆ describe a minimum of two maintenance strategies for building services.
- ◆ evaluate a range of different building management systems.
- ◆ produce a maintenance strategy for building services.
- ◆ explain the essential parts of a building services maintenance programme.
- ◆ evaluate the effectiveness of a maintenance strategy for building services.



Higher National Unit Support Notes

Unit title: Facilities Management: Property, Fabric and Building Services Maintenance (SCQF level 8)

Unit support notes are offered as guidance and 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

The following guidance provides additional information on the extent and scope of information learners could expect to display when meeting outcomes.

This unit could provide underpinning knowledge covered by National Occupation Standard Units 'Plan estates in facilities management' ASTFM514 and 'Manage assets and the maintenance strategy' ASTFM508.

Outcome 1

- ◆ Evaluation of the fabric maintenance implications of different building structures is expected to include both the fabric and components, eg use of steel, brick, wood, glass, cladding, etc. Additionally learners are expected to demonstrate understanding of how different construction designs, methods and materials will affect fabric maintenance.
- ◆ Learners are expected to make reference to new vs old buildings, cost and complexity of maintenance, environmental performance and presence of hazardous materials.
- ◆ Building services which could be incorporated into building structures may include utilities, sewage, heating, ventilation, lifts, IT and data, emergency lighting, etc.
- ◆ Methods to incorporate services within buildings may include the use of ceiling voids, raised floors, exposed services, etc.
- ◆ Considerations for mechanical and electrical building services is expected to include a description of legal and regulatory compliance and the use of these to maintain building control systems and public health.
- ◆ Cabling and IT services is expected to include their distribution, flexibility to respond to change of layout or equipment.
- ◆ Learners evaluating the services within a building are expected to make explicit reference to mechanical, electrical and IT services within their answers.
- ◆ Statutory requirements a building must comply with in order to be operational is expected to make reference to the requirement for a building warrant, inspection from building control and any additional statutory compliance relevant to the building and its operational purposes.

Higher National Unit Support Notes (cont)

Unit title: Facilities Management: Property, Fabric and Building Services Maintenance (SCQF level 8)

Outcome 2

- ◆ Learner's fabric maintenance service plan is expected to include monitoring tools.
- ◆ The objective of the learner's fabric maintenance strategy should be to keep the building safe, useable and retaining its value.
- ◆ Strategic plans should use a range of strategic tools to analyse advantages and disadvantages of corrective, preventative and predictive maintenance strategies.
- ◆ Strategies are expected to include an implementation plan and feed into the service plan.
- ◆ Approaches to delivering building maintenance is expected to compare in-house versus outsourced models.
- ◆ The fabric maintenance service plan is expected to highlight the following stages: development; mobilising service; ongoing review. This should be in line with the learner's fabric maintenance strategy.
- ◆ Strategies used to monitor a building fabric maintenance programme should include the use of specialists and may include surveys, occupant feedback and forward maintenance plans.
- ◆ Methods to evaluate monitoring strategies could make reference to contract progress meetings, inspection, audit of maintenance regimes and continues improvements.

Outcome 3

- ◆ Different approaches to maintenance strategies for building services should include reactive and planned maintenance.
- ◆ Evaluation of different building management systems is expected to include a consideration of current systems for remote and on-site monitoring alongside recent developments.
- ◆ Evaluation and analysis of the effectiveness off a maintenance strategy for building services is expected to the use of key performance indicators (KPIs), conformance to service level agreements (SLAs), contract progress meetings, audit/inspection reports and feedback.
- ◆ Essential parts of a maintenance strategy should include the legislative requirements for facilities managers and employers including approved codes of practice (ACOPs) and British Standards, this may include, but is not limited to water treatment, management of asbestos, fixed wire testing, residual current device (RCD) checks, portable appliance testing (PAT).
- ◆ Whilst examining the effectiveness of a maintenance strategy for building services, learners are expected to make relevant proposals about how they may improve management of the strategy once it is in place.

Higher National Unit Support Notes (cont)

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Guidance on approaches to delivery of this unit

This unit is likely to form part of a group award designed to provide learners with technical and professional skills and knowledge for employment within the facilities management sector. It supports delivery for learners who are employed within this field and will be able to draw on their previous knowledge and experience of the sector. It would be appropriate for centres to contextualise their teaching and encourage learners to use evidence and case studies from employment.

Guidance on approaches to assessment of this unit

Evidence can be generated using different types of assessment. The following are suggestions only. There may be other methods that would be more suitable to learners.

Centres are reminded that prior verification of centre-devised assessments would help to ensure that the national standard is being met. Where learners experience a range of assessment methods, this helps them to develop different skills that should be transferable to work or further and higher education.

Due to the focus on vocational skills and experience relevant to the facilities management sector throughout this unit, suggested methods for assessment will focus on utilising the learner's own experience. For Outcome 2 learners are expected to produce a fabric maintenance strategy and service plan. For Outcome 3 learners are expected to produce a maintenance strategy for building services incorporating the use of building management systems. The use of relevant case studies or learners' own life work experiences should be used to support the assessment of Outcomes 2 and 3. Outcome 1 could be assessed alongside Outcome 2 and/or 3 or via an essay, case study or report.

Assessment could be delivered as an e-assessment if desired; this may be particularly suitable for learners who are working whilst studying this unit.

Opportunities for e-assessment

E-assessment may be appropriate for some assessments in this unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or social software. Centres which wish to use e-assessment must ensure that the national standard is applied to all learner evidence and that conditions of assessment as specified in the evidence requirements are met, regardless of the mode of gathering evidence. The most up-to-date guidance on the use of e-assessment to support SQA's qualifications is available at www.sqa.org.uk/e-assessment.

Opportunities for developing Core and other essential skills

There is no automatic certification of Core Skills or Core Skills components in this unit, however there may be opportunities to develop the Core Skills of *Communication*, *Numeracy*, *Information and Communication Technology (ICT)*, *Problem Solving* and *Working with Others* at SCQF level 6.

History of changes to unit

| Version | Description of change | Date |
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General information for learners

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This section will help you decide whether this is the unit for you by explaining what the unit is about, what you should know or be able to do before you start, what you will need to do during the unit and opportunities for further learning and employment.

This unit has been designed to develop your knowledge and understanding of the maintenance implications associated with building structures and the services incorporated within these. You will gain skills in comparing, developing and analysing strategies for building use and the management of maintenance programmes within a range of facilities management contexts.

In Outcome 1 you will evaluate the maintenance implications of building structures and the services incorporated within them.

In Outcome 2 you will produce a fabric maintenance strategy and service plan.

In Outcome 3 you will produce a maintenance strategy for building services incorporating the use of building management systems.

This unit will be assessed via the production of two strategies. Outcome 1 may be assessed separately or alongside Outcomes 2 and/or 3.

You will be asked to show practical application of your knowledge and skills and will be encouraged to link assessments to your experience within the facilities management sector.