

# CONSTRUCTION AND THE BUILT ENVIRONMENT

## Unit 7: Value and use of the built environment: facilities management



## Construction and the Built Environment

### Level 2 Unit 7: Value and use of the built environment: facilities management

#### Sample scheme of work

This is an example of a possible scheme of work. You can use it as it is, or you can adapt it to meet your own delivery needs. You may wish to consider the provision of extra learning workshop time for those learners who need additional learning time.

This unit is assessed through an externally set and marked examination of duration one hour and thirty minutes. This will be a short answer test with 16 questions. The total number of marks available for the test is 48. Precise guidance on the examination specification is available in the unit specification.

This unit also contains sections entitled 'Guidance for Delivery', 'Opportunities for applied learning' and 'What activities might be involved in this unit?' This scheme of work is designed to support the information therein.

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| <b>Total GLH</b> | 60   |
| <b>Aim</b>       | <p>This unit provides learners with the opportunity to understand the contribution made by facilities management and other support services to the maintenance, development and economic benefit of the built environment.</p> <p>When they have achieved this unit learners will:</p> <ul style="list-style-type: none"> <li>• understand the contribution of facilities management to the construction and maintenance of the built environment, and how it benefits buildings</li> <li>• understand how facilities management services are effectively contracted, delivered, operated and managed</li> <li>• know about the health, safety and welfare legislation that relates to facilities management.</li> </ul> |

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| <p><b>Notes</b></p> | <p>The scheme of work presented here uses a task-based approach to teaching and learning, with applied learning being the central theme. The assessment for this unit is, however, external, and the scheme of work takes this into account.</p> <p><b>Key for Functional Skills (FS)</b></p> <p>There are three Level 2 FS associated with the Higher Diploma. These are broken down as follows:</p> <p>English: speaking and listening (S&amp;L E); reading (Read E); writing (Write E); or E (all) for all three</p> <p>Mathematics: representing situations using mathematics (RS M); analysing and processing using mathematics (A&amp;P M); interpreting and presenting results (I&amp;P M); or M (all) for all three</p> <p>Information and Communication Technology: use ICT systems (Use ICT); find and select information (F&amp;S ICT); develop, present and communicate information (DPC ICT); or ICT (all) for all three</p> <p><b>Guided Learning Hours</b></p> <p>There are 60 GLH associated with this unit. For the purposes of this scheme of work it is assumed that each session will be one hour long and that there will therefore be 60 sessions. Consortia are of course free to organise the time in any way that suits the needs of their learners and of the centres that comprise the consortium.</p> <p><b>Evidencing PLTS and FS</b></p> <p>PLTS are signposted against the assessment criteria throughout the unit, and can be evidenced from the learners' assessed work.</p> <p>Where FS are signposted it is because there are opportunities for the <b>development</b> of FS, rather than opportunities for <b>evidencing achievement</b> of FS from the formative assessments and carefully thought out teaching and learning strategies for that unit.</p> |
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| Session number | Topic  | Suggested activities, assignments, assessments and resources   | AC     | PLTS   | FS                              | GLH | Comments   |
|----------------|--|--|--------|--------|---------------------------------|-----|--|
| 1              | The contribution of facilities management to the construction and maintenance of the built environment | <p>The first activity should involve input from a practising facilities manager on what is meant by 'facilities management' (FM), what facility managers do, and the benefits of FM for the built environment (BE) and the community. Learners should take notes and use these notes to inform future study in this unit.</p> <p>The second activity should involve whole-group teacher-led sessions on how FM enhances the efficiency and lifespan of the buildings being managed. The importance of preservation and maintenance must be stressed, and the difference between 'hard' and 'soft' FM should be made clear to the learners, with examples of each provided.</p> <p>The third activity should be a whole-class discussion. This should take as its starting point an understanding of maintenance and development of the BE, and the importance of FM in terms of wealth creation, quality of life and the associated economic and financial benefits. The discussion should focus on the link between planned programmes of maintenance and a reduction in the need for emergency maintenance procedures, and the need to select the most economic method of providing soft FM services. The teacher will need to provide the starting points for the discussion and control the discussion to lead it in the right direction. Flash cards with details of the main points to be discussed should be distributed to the group. Scribes should be appointed to take notes and the teacher should collate those notes into a comprehensive handout.</p> | AC1a–c | IE2, 3 | E (all)<br>M (all)<br>ICT (all) | 36  | <p>The centre where the learner is studying will have a dedicated estates manager, facilities manager or caretaker, or will be using the services of either an external contractor or the local authority to provide such a service. It would be very useful if this person(s) were able to talk to the learners, possibly on several occasions throughout the unit.</p> <p>A visit to a hospital, leisure centre, sports stadium or housing association, with a presentation from the facilities manager, would be a good way of underpinning the above.</p> <p>Useful resources would include flow diagrams and charts explaining FM procedures and maintenance schedules for the centre in which the learners are studying.</p> |

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|----------------|--|---|--------|------|----------------------|-----|---|
| 2              | Contracting and delivery of facilities management services | <p>The first activity should involve the teacher identifying the roles undertaken by managers, engineers and other staff involved in both hard and soft FM roles. This should be supplemented by input from managers of staff involved in FM activities such as security, cleaning, grounds-keeping and catering.</p> <p>The second activity should involve teacher-led sessions on the various ways in which FM services are contracted and delivered. Two separate large commercial or public buildings* should be compared in terms of how the building is operated, managed, protected and maintained. The focus should be on the principles and use of totally in-house FM, internal FM overseeing the work of external specialist contractors, or fully external FM by large multi-services companies, rather than on specific FM techniques.</p> <p>The third activity should involve independent, web-based learner research into the ways in which buildings and structures are operated, managed, protected and maintained. This could be followed by the learners completing teacher-produced incomplete handouts that require the learners to identify the person who would undertake a specific FM task and whether that task would be considered as soft or hard FM. This should be used as a formative assessment, with the teacher correcting the learners' work and returning the completed handouts for further discussion.</p> | AC2a–c | -    | E (all)<br>ICT (all) | 18  | <p>* It would be useful if visits could be made to these buildings, and if the managers of these facilities were available to explain to the learners how each building is operated, managed, protected and maintained.</p> <p>Learners should be shown the services installations in the centre where they are studying. This should include explanations of the major issues associated with inspection and maintenance of electrical, gas, water, heating, ventilation and fire safety systems.</p> <p>Useful resources can be found at:<br/><a href="http://kerboodle.helpserve.com/index.php">http://kerboodle.helpserve.com/index.php</a></p> <p>This facility is on the Nelson Thornes Learning Space and is under continuous development.</p> |

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|----------------|--|--|---------|------|----------------------|-----|--|
| 3              | Health, safety and welfare legislation relating to facilities management | <p>The first activity should involve teacher-led sessions relating to the health, safety and welfare (HSW) legislation most appropriate to FM. The teacher should stress that FM is an important part of the construction and built environment sector, and not an activity separate from that sector. It must therefore pay as much attention to HSW as would a designer, a planner or a main contractor.</p> <p>The second activity should involve independent, web-based learner research into the documentation used to demonstrate that buildings and building services systems meet minimum health and safety requirements. In particular, the statutory requirements of building services systems such as gas, water, drainage and electricity should be identified and analysed. The learners' findings should be collated into a class handout by the teacher, for later distribution.</p> <p>It would be useful if this exercise were to be supplemented by input from experienced FM practitioners, including someone on the Gas Safe register, or someone who has achieved the certification associated with the 17th Edition IEE Wiring Regulations, or someone familiar with the Water Supply (Water Quality) Regulations 2000.</p> <p>There is no requirement for in-depth knowledge of either legislation or practice but learners must explore the purposes of the legislation and the possible consequences of poor maintenance in terms of issues such as carbon monoxide poisoning, legionella, Sick Building Syndrome, and health problems caused by poor drainage and impure water supplies.</p> | AC3a, b | IE4  | E (all)<br>ICT (all) | 4   | <p>HSW issues should be linked to the content of the last topic and, in particular, the delivery of FM services.</p> <p>The issues associated with inspection and maintenance of electrical, gas, water, heating, ventilation and fire safety systems should be explored in terms of the appropriate legislation and the good maintenance practices used to comply with the legislation and ensure the health and safety of the users of the buildings in question.</p> <p>Useful resources can be found at:<br/> <a href="http://www.hse.gov.uk/pubns">www.hse.gov.uk/pubns</a><br/> <a href="http://www.bifm.org.uk">www.bifm.org.uk</a></p> |

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|----------------|-----------------|--|-----|------|----|-----|---|
| 4              | Mock assessment | <p>It is recommended that one hour is spent in undergoing a 'mock' test. After the teacher has marked these papers, one further hour should be dedicated to the teacher going through the paper, giving the correct answers and explaining the logic behind the selection of the correct answers.</p> <p>An exemplar external assessment and mark scheme for this unit can be downloaded from:<br/> <a href="http://www.diplomainfo.org.uk/CBE-External-SAMs.asp">www.diplomainfo.org.uk/CBE-External-SAMs.asp</a></p> | All | -    | -  | 2   | It is important that teachers use the 'Examination specification' found in the unit specification, to prepare their learners for the external test. The tests are set very precisely against this examination specification, and learners will benefit from knowing the broad areas to be tested and how the marks are distributed across the unit. |