



<b>Unit Title:</b>	<b>System Operation</b>
OCR unit number	39
Level:	3
Credit value:	12
Guided learning hours:	100
Unit reference number:	A/500/7340

Candidates undertaking this unit must complete real work activities in a work environment. Simulation is only allowed in exceptional circumstances (please refer to the centre handbook for further details).

## Unit purpose and aim

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This is the ability to operate and monitor a system which can be any combination of equipment, hardware and software.

This may include:

- using data backup and restore routines
- handling of incidents
- controlling and monitoring availability and performance of system components
- start-up/close-down routines
- scheduling routine or preventative maintenance
- maintenance of operating plans and schedules

Examples of 'operational activities' are:

- replenishment of consumables
- routine or preventative maintenance
- data backups

Learning Outcomes	Assessment Criteria	Knowledge, understanding and skills
<b>The Learner will:</b> 1 Know how to operate the system	<b>The Learner can:</b> 1.1 Explain the operating procedures that are applicable to the system, such as: <ul style="list-style-type: none"> <li>• required service levels (e.g. availability, quality);</li> <li>• routine maintenance;</li> <li>• monitoring</li> <li>• data integrity (e.g. backups, anti-virus)</li> <li>• consumables use,</li> </ul>	Candidates must have a detailed understanding of a range of systems and the operational procedures involved.  Candidates must have a detailed understanding of how the systems function during operation and the affects of operational activities on functionality.

Learning Outcomes	Assessment Criteria	Knowledge, understanding and skills
	<p>storage &amp; disposal</p> <ul style="list-style-type: none"> <li>• Health &amp; Safety</li> <li>• escalation</li> <li>• information recording and reporting</li> <li>• obtaining work permissions</li> <li>• security and confidentiality</li> </ul> <p>1.2 Describe system functionality during normal operation</p> <p>1.3 Describe the effects of operational activities on system functionality</p>	
2 Operate systems	<p>2.1 Use and operate the system following appropriate procedures</p> <p>2.2 Identify system faults and resolve or escalate system faults as appropriate</p> <p>2.3 Gather and record specified operational information</p> <p>2.4 Assess and minimise risks such as:</p> <ul style="list-style-type: none"> <li>• loss or corruption of the data</li> <li>• loss of service</li> <li>• damage to equipment</li> <li>• effects on customer operations</li> </ul>	<p>Candidates must have a detailed understanding of how to operate a range of systems including:</p> <ul style="list-style-type: none"> <li>• fault diagnosis and resolution/escalation</li> <li>• information collection and recording</li> </ul> <p>Candidates must have a detailed understanding of how to assess and minimise risks.</p>
3 Maintain and implement system operating procedures	<p>3.1 Provide advice and guidance on system operation to immediate colleagues</p> <p>3.2 Select the procedures to be followed</p> <p>3.3 Schedule operational activities to minimise disruption to system functionality</p> <p>3.4 Collate operational information</p>	<p>Candidates must have a detailed understanding of how to maintain a range of systems. They must be able to:</p> <ul style="list-style-type: none"> <li>• provide advice and guidance</li> <li>• select appropriate procedures</li> <li>• schedule operational activities</li> <li>• collate information</li> </ul>

## Assessment

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Candidates undertaking this unit must complete real work activities in order to produce evidence to demonstrate they are occupationally competent. Real work is where the candidate is engaged in activities that contribute to the aims of the organisation by whom they are employed, for example in paid employment or working in a voluntary capacity.

Simulation is only allowed for aspects of units when a candidate is required to complete a work activity that does not occur on a regular basis and therefore opportunities to complete a particular work activity do not easily arise. When simulation is used, assessors must be confident that the simulation replicates the workplace to such an extent that candidates will be able to fully transfer their occupational competence to the workplace and real situations.

Internal quality assurance personnel must agree the use of simulated activities before they take place and must sample all evidence produced through simulated activities.

It is the assessor's role to satisfy themselves that evidence is available for all performance, knowledge and evidence requirements before they can decide that a candidate has finished a unit. Where performance and knowledge requirements allow evidence to be generated by other methods, for example by questioning the candidate, assessors must be satisfied that the candidate will be competent under these conditions or in these types of situations in the workplace in the future. Evidence of questions must include a written account of the question and the candidate's response. Observations and/or witness testimonies must be detailed and put the evidence into context ie the purpose of the work etc.

All of the assessment criteria in the unit must be achieved and clearly evidenced in the submitted work, which is externally assessed by OCR.

Evidence for the knowledge must be explicitly presented and not implied through other forms of evidence.

## Evidence requirements

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**All aspects of the assessment criteria must be covered and evidence must be available that shows where and how the assessment criteria have been achieved.**

### Assessment Criterion 1

Candidates must provide a detailed explanation of at least 3 different systems, their operational procedures, how they function during operation and how this operation can affect the functionality of the systems.

### Assessment Criterion 2

Candidates must provide evidence of operating at least 3 different systems. The evidence may include a detailed witness testimony and/or observation.

They must provide evidence of conducting fault diagnosis for at least 3 different faults, 2 of which they resolve and one they would need to escalate.

They must provide evidence of carrying out a range of risks assessments relating to minimising the risks to data, service, equipment and customer operation.

### Assessment Criterion 3

Candidates must provide evidence of maintaining and implementing system operating procedures. Evidence may include a detailed report supported by operational logs and records, emails of discussions providing advice and guidance. Other forms of evidence may include detailed witness testimonies and/or observations

**Candidates are encouraged to choose activities which will allow them to cover all or a majority of the criteria at one time. It is not necessary to use different activities for each element of the criterion.**

## Guidance on assessment and evidence requirements

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Evidence can reflect how the candidate carried out the process or it can be the product of a candidate's work or a product relating to the candidate's competence.

For example: The process that the candidate carries out could be recorded in a detailed personal statement or witness testimony. It is the assessor's responsibility to make sure that the evidence a candidate submits for assessment meets the requirements of the unit.

Questioning the candidate is normally an ongoing part of the assessment process, and is necessary to:

- test a candidate's knowledge of facts and procedures
- check if a candidate understands principles and theories *and*
- collect information on the type and purpose of the processes a candidate has gone through
- Candidate responses must be recorded

It is difficult to give a detailed answer to how much evidence is required as it depends on the type of evidence collected and the judgement of assessors. The main principles, however, are as follows: for a candidate to be judged competent in a unit, the evidence presented must satisfy:

- all the items listed, in the section 'Learning Outcomes'
- all the areas in the section 'Assessment Criteria'

The quality and breadth of evidence provided should determine whether an assessor is confident that a candidate is competent or not. Assessors must be convinced that candidates working on their own can work independently to the required standard.

## Additional information

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For further information regarding administration for this qualification, please refer to the OCR document '*Admin Guide: Vocational Qualifications*' (A850) on the OCR website [www.ocr.org.uk](http://www.ocr.org.uk) .