OCR
Oxford Cambridge and RSA

Unit Title:	**Web fundamentals**
OCR unit number:	31
Unit reference number:	R/601/3512
Level:	2
Credit value:	7
Guided learning hours:	60

Unit aim

The aim of this unit is that learners will:

- Know web architecture and components
- Know about the technologies used to build and operate websites
- Implement specified components of a web-site

Learning Outcomes	**Assessment Criteria**	**Knowledge, understanding and skills**
The Learner will: 1 Know web architecture and components	**The Learner can:** 1.1 List the hardware and software components which enable the internet and web 1.2 State the role of the TCP/IP protocol 1.3 State the role of internet service providers, web hosting services and domain name registrars 1.4 Identify available types of web functionality	• the hardware and software used for the internet and web • TCP/IP protocols • the role of ISPs, web hosting services and domain name registrars • web functionality e.g. purpose, function, interaction
2 Know about the technologies used to build and operate websites	2.1 State the purpose of markup languages and list commonly used examples 2.2 Identify the roles of: • web runtime environments • web application programming languages; and • databases in building websites and web applications 2.3 Identify typical product stack combinations that can be used for web development	• markup languages • web runtime environments • web application languages and databases • product stack combinations used for web development

Learning Outcomes	Assessment Criteria	Knowledge, understanding and skills
3 Implement specified components of a web-site	3.1 State the components required to produce a web-site 3.2 Design specified components of a web-site 3.3 Develop specified components of a web-site 3.4 Test specified components of a web-site	• the components required for building a web-site and how they are used • how to design and develop components of a website and test their functionality

Assessment

The qualification has been designed to develop knowledge, understanding and skills in the full range of functions involved in the planning and control, hardware, software and systems installation, software solutions and the production of customer support materials. It also provides opportunities for learners to study towards system and network management, to specialise in one or more specific programming languages in addition to being able to take units that are vendor specific.

Each unit within the specification is designed around the principle that candidates will build a portfolio of evidence relating to progression towards meeting the unit assessment criteria.

The unit assessment criteria reflect the demands of the learning outcomes for each unit.

In order for candidates to be able to effectively progress towards meeting the requirements of each assessment criteria, tutors must make sure that the supporting knowledge, understanding and skills requirements for each criteria are fully addressed. The identified knowledge, understanding and skills are not exhaustive and may be expanded upon or tailored to particular contexts to which the unit is being taught and the assessment criteria applied.

We recommend that teaching and development of subject content and associated skills be referenced to real vocational situations, through the utilisation of appropriate industrial contact, vocationally experienced delivery personnel, and real life case studies.

All the learning outcomes and assessment criteria must be clearly evidenced in the submitted work, which is externally moderated by OCR.

Results will be Pass or Fail.

Guidance on assessment

Candidates do not have to achieve units in any particular order and tutors should tailor learning programmes to meet individual candidate needs. It is recommended that, wherever possible, centres adopt a holistic approach to the delivery of the qualification and identify opportunities to link the units.

Centres are free to deliver this qualification using any mode of delivery that meets the needs of their candidates. Whatever mode of delivery is used, centres must ensure that learners have access to appropriate resources and consider the candidates' complete learning experience when designing learning programmes. This is particularly important in relation to candidates studying part time alongside real work commitments where candidates may bring with them a wealth of experience that should be utilised to maximum effect by tutors and assessors.

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'

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

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

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