

CAMBRIDGE INTERNATIONAL AS & A LEVEL

Information Technology 9626

Syllabus Overview

Examinations 2028, 2029 and 2030

Understanding the whole syllabus

The subject connects how digital systems work with how useful solutions are designed and evaluated. Knowing a term is only the starting point: you need to explain a system, apply a method and judge whether a solution meets its requirements. The assessment route determines whether those skills are demonstrated on paper or at a computer.

For Information Technology 9626, the content map below follows the approved subject briefing and the official syllabus. Labels group related areas for orientation; the detailed syllabus remains the authority for individual learning requirements.

Content map

Syllabus area or component	What the area covers
AS: Systems, data and security	At AS Level, you will study data processing, hardware and software, monitoring and control systems, algorithms, flowcharts and digital security. You will also examine the digital divide and expert systems.
AS: Practical software skills	Practical work includes spreadsheets, computer modelling, databases, file handling, and video and audio editing.
A Level: Advanced theory and practical work	At A Level, the course extends into the social impact of IT, emerging technologies, communications systems, project management and the system life cycle. Advanced practical skills include data analysis and visualisation, mail merge, vector and bitmap graphics, animation and web programming.
Selecting and evaluating digital solutions	Throughout the course, you will select appropriate tools, work efficiently with electronic files and evaluate whether a digital solution meets its intended purpose and audience.

These areas should be read as a connected course. Begin with the foundational knowledge identified in the first part of the map, then build towards the applications and explanations that depend on it. Alternate explanation with application. Keep an organised record of commands, algorithms or procedures and the errors they resolve. Practise the assessed mode, including written reasoning when an examination is paper-based. Where a row describes a choice of topics or components, study the selection required by your agreed route rather than treating all alternatives as compulsory.

Qualification and component choices

Qualification route	Components	Meaning
AS Level only	1 and 2	Standalone AS qualification, graded a-e
Staged A Level	1 and 2 first; then 3 and 4	Carry forward eligible AS marks within Cambridge rules and time limits
Full A Level in one series	1, 2, 3, 4	All required components; A Level graded A*-E

AS and A Level percentages refer to different qualification totals. A component can therefore have one weighting at AS and a different weighting in the full A Level. Confirm the entry option and any carry-forward arrangements with the centre.

The syllabus assumes knowledge and skills equivalent to IGCSE ICT 0417 or 0983. A particular certificate is not the same as a compulsory entry condition, but the assumed knowledge remains important.

The assessed skills

Assessment objectives describe the abilities Cambridge looks for across the qualification. The following explanations paraphrase the syllabus objectives; they are not additional topics or separate orientation tasks.

Assessment objective	Meaning for the learner
AO1: Knowledge and understanding	Select and communicate relevant IT knowledge.
AO2: Application	Use IT knowledge, skills and judgement to produce a solution.
AO3: Analysis and evaluation	Analyse a solution and present a justified conclusion.

These abilities work together in an answer. Accurate knowledge supports application, while a clear explanation shows how the evidence or method leads to a conclusion. The balance varies by component, so the next lesson connects these abilities with the actual assessment formats.

Key pointers: Follow the stated examination-year syllabus, cover the required areas for your route and develop skills alongside knowledge. **Next:** Open **Assessment Overview**.