

CAMBRIDGE IGCSE

Information and Communication Technology 0417

Syllabus Overview

Examinations 2026, 2027 and 2028

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 and Communication Technology 0417, 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
Digital systems and communication	The theoretical part of the syllabus covers computer hardware and software, input and output devices, storage, networks, digital communication and the social effects of information technology.
ICT uses, systems and responsibility	You will also examine ICT applications in fields such as education, healthcare, banking, retail and manufacturing, together with the systems life cycle, data security, online safety and responsible technology use.
Practical production skills	The practical section develops skills in file management, image editing, document layout, styles, proofreading and the creation of graphs and charts. You will then apply these skills through document production, databases, presentations, spreadsheets and website authoring using HTML and CSS.

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

All candidates follow the component structure shown in the Assessment Overview. There is no separate Core/Extended route in this syllabus.

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 Recall, select and communicate knowledge and understanding of ICT	Select accurate subject knowledge, terminology and examples that answer the question, and explain their meaning.
AO2 Apply knowledge, understanding and skills to produce ICT-based solutions	Select accurate subject knowledge, terminology and examples that answer the question, and explain their meaning.
AO3 Analyse, evaluate, make reasoned judgements and present conclusions	Interpret the information, apply an appropriate method and explain the relationships or reasoning that support the answer.

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**.