

CAMBRIDGE IGCSE

Statistics 0479

Syllabus Overview

Examinations 2028, 2029 and 2030

Understanding the whole syllabus

Mathematical understanding joins accurate techniques with the ability to choose and explain a method. Topics connect through notation, algebraic relationships, diagrams and models. The route table identifies the components that apply to you; it is not a requirement to study every optional paper.

For Statistics 0479, 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
The statistical investigation process	The syllabus follows the complete process of working with data.
1-3: Collection and representation	You will learn how data is collected through surveys, experiments and sampling methods, and how the quality of that data may be affected by bias or poor design. You will organise and present information using tables, charts, diagrams and frequency distributions.
4-10: Measures, transformations, probability, rates and indices	You will calculate and interpret measures of central tendency, quartiles, percentiles and measures of dispersion, including standard deviation. You will also study transformations of data sets, probability, probability distributions, rates and index numbers.
11-12: Bivariate data and time series	Later topics examine relationships between two variables and patterns over time. Through bivariate distributions and time series, you will learn to identify association, interpret trends and make informed predictions.
Context, limitations and communication	Throughout the course, the emphasis is not only on calculation. You will choose suitable statistical techniques, interpret results in context, recognise limitations and communicate conclusions clearly.

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. Secure the prerequisite technique before increasing problem complexity. Keep a record of whether an error came from choosing a method, carrying it out or interpreting the answer, then revisit the relevant step. 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 Knowledge and understanding of statistical techniques	Select accurate subject knowledge, terminology and examples that answer the question, and explain their meaning.
AO2 Interpretation, communication and problem-solving	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**.