Level 3 Certificate AQA 1350	CORE MATHEMATICAL STUDIES
SPECIFIC ENTRY REQUIREMENTS	Core maths is designed for students who score grade 4 or better in mathematics at GCSE. The course is a development from GCSE, but is less demanding than A Level mathematics.
COURSE CONTENT	1. **Data analysis.** Students will learn how to sample, analyse, collect and compare data, appreciating the strengths and weaknesses of the techniques they have used. Data will be represented numerically using averages, or diagrammatically using graphical methods. Scientific or graphical calculators are allowed. Spreadsheets will be used to teach some of the course, and the use of technology is encouraged. 2. **Maths for personal finance**, including percentages, efficient numerical calculations, interest rates, credit payments and taxation. 3. **Estimation.** Students will learn to solve problems where exact calculations may not be possible, or not appropriate. 4. **Critical analysis of data**, including comparing results from models with real data, and analysing claims made in the media. The following items are optional content: students will choose one of the sections to work on. It may be that the teacher chooses which section, so that the key parts can be taught to a class. **statistical techniques:** normal distribution, correlation, regression **critical analysis:** critical path analysis, risk analysis and Gantt charts **graphical techniques:** graphs of functions, rates of change, speed, acceleration and exponential functions. This section develops useful skills which will complement certain modules within a science subject.
EXAMINATIONS AND ASSESSMENTS	At the end of Year 12, students will be assessed, and given a qualification at Level 3, equivalent to an AS level. Grades will be reported from A to E. **Paper 1:** 90 minutes of common content **Paper 2:** 90 minutes on one of the following: 2a: statistical techniques 2b: critical path and risk analysis 2c: graphical techniques
SKILLS, LINKS AND PROGRESSION	This one-year course will enhance skills for students who would like to study A Level sciences, but for those planning to study physics, our recommendation continues to be that A Level mathematics should be studied. Core maths complements a number of A Level courses which involve aspects of maths, such as psychology, geography, business studies, computer science, physical education and sociology. There is a small amount of overlap with A Level mathematics. Students are allowed to study this **in addition to** A Level mathematics.
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