**AQA Level 3 Core Maths - Overview 2022-23**

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| **Overview** | **Autumn Term** | | **Spring Term** | | **Summer Term** | |
| *The Core Maths course contains a heavy focus on data analysis and statistical techniques. Students will expect to become familiar with critical analysis of articles, data and apply the techniques learnt throughout the course to various unseen contexts.* | **Term 1** | **Term 2** | **Term 3** | **Term 4** | **Term 5** | **Term 6** |
| **Data**   * Types of data * Sampling methods and advantages/disadvantages * Representing data * Averages, spread and percentiles | **Financial maths**   * Spreadsheets * Interest rates and Annual Equivalent Rate (AER) * Repayments and credit (student loans/mortages) including Annual Percentage Rate (APR) | **Financial maths**   * Income Tax, National Insurance, Value Added Tax (VAT) * Inflation - Retail Price Index (RPI) and Consumer Price Index (CPI)   **Estimation**   * Fermi Estimation problems | **Critical analysis**   * Presenting logical and reasoned arguments in context * Communicating mathematical approaches and solutions * Analysing critically   **Normal distribution**   * Identify the shape * Notation * Standard normal distribution * Calculating probabilities * Inverse normal distribution * Knowledge of 66%-95% rule | **Probabilities and estimation**   * Point estimates * Confidence intervals (symmetrical and normally distributed)   **Correlation and regression**   * Types of correlation * Correlation does not necessarily imply causation * Product moment correlation coefficient (PMCC) * Regression lines - calculating, plotting, interpolation/extrapolation and interpretation | *Revision programme* |