Key Stage 4 - YEAR 10 MATHS HIGHER - 2022-2023
Curriculum Map for Students

|  | Autumn I | Autumn 2 | Spring I | Spring 2 | Summer I | Summer 2 |
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| Topic Overview | Unit I - Number Unit 2 - Algebra | Unit 3 - Interpreting and representing data <br> Unit 4 - Fractions, ratio and Percentages | Unit 5 - Angles and Trigonometry Unit 6 - Graphs | Unit 7 - Area and Volume Unit 8 - <br> Transformations and constructions | Unit 9- Equations and Inequalities Unit 10 -Probability | Unit II Multiplicative Reasoning Unit I2-Similarity and Congruence |
| Focus | Unit I - Rounding and estimating. HCF and LCM. Calculating with indices. Fractional and negative indices. Standard form. Surds. Unit 2 - Algebraic indices. Expanding and Factorising. Equations and formulae. <br> Sequences, including linear and non- linear. | Unit 3 - Statistical diagrams. Scatter graphs and lines of best fit. Averages and range. Unit 4 - Operations with fractions. Using ratio. Percentages including increase/ decrease and reverse percentages. Converting between fractions, decimals and percentages. | Unit 5 - Angles in parallel lines. Interior and exterior angles of polygons. Pythagoras' theorem. Trigonometry in right angled triangles. Unit 6 - Plotting linear graphs. Gradient and equation of a line. Graphing rates of change. Real life graphs. Quadratic, cubic and reciprocal graphs. | Unit 7 - Perimeter and Area. Units and accuracy. Volume and surface area of prisms. Circles and sectors. Pyramids, cones and spheres. <br> Unit 8 - Reflection, rotation, translation and enlargement. Bearings and scale drawings. Constructions and Loci. | Unit 9 - Solving quadratic equations. Completing the square. Solving simultaneous equations. Solving linear inequalities. <br> Unit 10 - Combined events. Mutually exclusive events. Experimental probability. Tree diagrams. Venn diagrams and set notation. | Unit II-Growth and decay. Compound measures. Direct and inverse proportion. Unit 12 - Congruence and geometric proof. Similarity including lengths, areas and volumes. |
| Assessment | Unit test at the end of each topic. | Unit test at the end of each topic. | Unit test at the end of each topic. | Unit test at the end of each topic. | Unit test at the end of each topic. | Unit test at the end of each topic. <br> End of year 10 exam |

