## Key Stage 4 Curriculum Overview

Progression from Key Stage 3 and optional progression through Post-16 :

|  | Autumn Term | Spring Term | Summer Term |
| :---: | :---: | :---: | :---: |
| Year 9 |  |  | Students at the end of Key Stage 3 will have: |
|  |  |  | - A solid foundation in the six strands of Mathematics; Number, Ratio, Algebra, Geometry, Probability and Statistics. <br> - Fluency in the basic Numeracy Skills which are transferable across the curriculum. <br> - Built up resilience in dealing with Mathematical reasoning and problem solving. |
| $\begin{aligned} & \hline \text { Year } \\ & 10 \end{aligned}$ | - Congruence, Similarity \& Enlargement <br> - Trigonometry <br> - Representing solutions of equations \& inequalities <br> - Simultaneous equations <br> Functional Skills Level 1 (Nurture Group) If students successfully pass Level 1, they will progress onto Level 2. | - Angles \& Bearings <br> - Working with circles <br> - Vectors <br> - Ratios \& fractions <br> - Percentages \& Interest <br> - Probability <br> Functional Skills Level 2 (Nurture Group) | - Collecting, representing \& interpreting data <br> - Non-calculator methods <br> - Types of number \& sequences <br> - Indices \& roots <br> - Manipulating expressions <br> Functional Skills Level 2 (Nurture Group) |
| $\begin{aligned} & \text { Year } \\ & 11 \end{aligned}$ | - Gradients \& lines <br> - Non-linear graphs <br> - Using graphs <br> - Expanding \& factorising <br> - Changing the subject <br> - Functions | - Multiplicative reasoning <br> - Geometric reasoning <br> - Algebraic reasoning <br> - Transforming \& Constructing <br> - Listing \& describing <br> - Show that questions | - Revision and examinations |

## By the end of Key Stage 4 students should be able to:

- perform routine single- and multi-step procedures effectively by recalling, applying and interpreting notation, terminology, facts, definitions and formulae
- interpret and communicate information effectively
- make deductions, inferences and draw conclusions
- construct chains of reasoning, including arguments
- generate strategies to solve mathematical and non-mathematical problems by translating them into mathematical processes, realising connections between different parts of mathematics.
- interpret results in the context of the given problem
- evaluate methods and results

