The GCSE options aim to further students’ knowledge in all areas.

In computer science, students learn to write, execute, test and debug their own programmes, using Python, Arduino C and C# for Unity 3D and VR environments. They learn about standard computer architecture, as well as the latest chip developments, networking and internet technologies, logic, binary maths and the digitisation of data. They will also gain an appreciation of current and emerging computing technologies, the benefits of their use, their potential risks and their ethical implications. Students will develop their making skills with a practical robotics project, and also have time for a substantial individual project, as well as a piece of research into an area of their own interest.

In creative technology, students will be writing, executing, testing and debugging their own programmes, using Javascript based p5, Sonic Pi and Bolt for Unity 3D and VR environments. They will learn about standard computer architecture and how it is optimised for graphics. They will also gain an appreciation of current and emerging creative technologies, the benefits of their use, their potential risks and their ethical implications. Students will develop their making skills with a practical project on creative, interactive installations, and also have time for a substantial individual project, as well as a piece of research into an area of their own interest.