

Computing: Year 9 Overview

Autumn Term 1: Python programming with sequences of data

Students will be building on the python knowledge from year 8 and improving upon this by creating a python project that will deal with user inputs.

Autumn Term 2: Media – animations

Students will be learning how to use blender to create animations based on designs they create. Students will be introduced to Blender and its inner workings to create their animations.

Spring Term 1: Data Science

Students will be learning about data science, and how visualising data can help us to provide insights that may not be as obvious when looking at raw data. Students will be introduced to the investigative cycle PPDAC (problem, plan, data, analyse, conclusion) and how to apply it.

Spring Term 2: Representations – going audiovisual

Students will focus on digital media such as images and sounds and discover the binary digits that lie beneath these types of media.

Summer Term 1: Introduction of cybersecurity

The students will embark on an eye-opening journey of discovery about techniques used by cybercriminals to steal data, disrupt systems, and infiltrate networks. The learners will start by considering the value of their data to organisations and what they might use it for.

Summer Term 2: Physical programming

This unit applies and enhances the students' programming skills in a new engaging context: physical computing, using the BBC micro:bit.