

Oasis Academy Lister Park ICT Curriculum: Long Term Plan – Year 9

Knowledge. Across year 9 students will build on and link together the knowledge from year 7 and 8 so that they are well prepared for KS4 study. In Autumn 1 students will develop more in depth knowledge on python programming and how data is sequenced. Students will then go onto to study a further media unit this time including animation and the manipulation of objects to create animations. In Spring 1 students develop their knowledge in how data can be used to investigate problems in the real work with the data science units. There is a build on the binary work students completed in year 8 with unit 4 in Spring 2 allowing students to address how images and sound can be represented using binary code. In Summer 1 students will investigate how organisations can prevent cyber attacks by looking into security measures and to end the year students will consider physical computing by means of controlling micro bits,

ICT Skills Students will have the opportunity to use some of the more advanced features in the python software to so manipulate strings and lists. Python will also be used to programme the micro bit. Animation software such has Blender and Adobe Flash will be taught to allow students to animate their designs

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 9	Python programming with sequences of data	Media: animations	Data science	Representations: going audio-visual	Cyber Security	Physical Computing
What will be covered	Manipulating strings and lists. Creating a programming project.	Creating 3D animations through object manipulation and tweaking and adjusting lighting and camera angles.	Using data to investigate problems and make real-world changes.	Representing images and sound using binary digits.	Identifying how users and organisations can protect themselves from cyberattacks.	Sensing and controlling with the Micro: bit.