

Curriculum Overview: Year 13 Computer Science

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic 1.3 Exchanging data 3.2 Design of the solution 1.5 Legal, moral, cultural and ethical issues	Topic 1.5 Legal, moral, cultural and ethical issues 2.1 Elements of computational thinking 3.3 Developing the solution	Topic 2.3 Algorithms 3.3 Developing the solution	Topic 2.3 Algorithms 3.3 Developing the solution 3.4 Evaluation	Topic Paper 1/2 revision	Topic N/A
Links to prior learning KS4 1.3 Computer networks/1.4 Network security/1.6 Ethical and legal issues Stretch and Challenge Enquiry How do cloud based companies secure their data?	Links to prior learning KS4 2.1 Algorithms/2.2 Programming fundamentals/2.5 Programming languages and IDEs Stretch and Challenge Enquiry How is AI going to alter the modern city?	Links to prior learning 2.1 Algorithms/2.2 Programming fundamentals /2.5 Programming languages and IDEs Stretch and Challenge Enquiry How can you recognise the search and sorting algorithms in Python?	Links to prior learning KS4 2.1 Algorithms/2.2 Programming fundamentals/2.3 Producing robust programs Stretch and Challenge Enquiry How can I produce robust test plans?	Links to prior learning 1.1,1.2,1.3,1.4,1.5 2.1,2.2,2.3 Stretch and Challenge Enquiry How can you answer exam questions using OCR reference language?	Links to prior learning Stretch and Challenge Enquiry
Equipment Needed Idle / Pycharm Google Classroom A device to be able to program on (PG ONLINE A Level Computer Science Book)		Wider Reading Essential Maths Skills for AS/A Level Computer Science (Victoria Ellis, Gavin Craddock)		Family activities Discuss some of the programs they have created. If you have a PC or laptop and can access the following website to program https://www.tutorialspoint.com/compilers/online-python-compiler.htm Or download the free Python software ; students can work on their programming skills. Video tutorials to watch here	