



Hampton Court House

Curriculum Outline 2019/20 – Year 11 ICT & Computing (SMS)

Autumn 2019

Principal Text: *PG Online IGCSE Computer Science Resources*

Complete the IGCSE Computer Science theory units

- Software and security
- Ethics

Review and consolidate practical skills in problem solving and design; creating flowcharts; writing pseudocode and programming concepts in C#.

Links with fundamental values

Software and security - the rule of law

Ethics - individual liberty, the rule of law

Communication and internet technologies - individual liberty, the rule of law, democracy & mutual respect.

Social, moral, spiritual and cultural content

Pupils learn the importance of computer law, ethics, moral and social issues. Pupils consider both the benefits and the problems that arise from the widespread use of technology in society.

Opportunities to independently extend learning

Pupils will continue to be encouraged to install C# on their home computers to continue to develop their programming skills.

All electronic resources will be made available for students to study at home.

Spring 2020

Complete the pre-release material programming task, including a review of data structures, with a focus on creating clear and accurate flowcharts. Following on from this pupils will create pseudocode from their flowcharts for the pre-release problem.

Preparation for the examinations will continue with a review of databases and theory topics covered in Year 10.

Summer 2020

Principal Text: *Cambridge IGCSE Computer Science Study and Revision Guide*

Revision of Theory Units:

- Data representation
- Communication and internet technologies
- Hardware
- Input and output devices
- Software and security
- Ethics

Practice exam papers for theory and programming.