



# Hampton Court House

## Curriculum Outline 2020/21 – Year 12 ICT & Computing (NVA)

### Autumn 2020

Principal Text: 1. *Computer Science for A Level (Hodder Education)*  
2. *OCR A and AS Level Computer Science (PG Online)*

For the first half term, pupils will be reviewing their knowledge of programming and learning C#.

During the second half term pupils will continue to learn to program in C#

Theory Units will include:

- Computational Thinking & Problem Solving
- Data Structures
- Systems Software

Links with fundamental values

Learning about acceptance and tolerance in their use of the internet, school and workplace.

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

Opportunities to independently extend learning  
Pupils can install all the software used for this course on their home computers and carry on development.

### Spring 2021

Principal Text: 1. *Computer Science for A Level (Hodder Education)*  
2. *OCR A and AS Level Computer Science (PG Online)*

Pupils will continue to strengthen and consolidate their programming skills and start to scope out their exam based programming project.

For the programming project pupils will be expected to analyse, design, develop, test, evaluate and document a program written in a suitable programming language.

Theory Units will include:

- Software Development
- Data Structures
- Exchanging Data
- Networks

Pupil will be required to work independently on the coding element of their programming project .

### Summer 2021

Principal Text: 1. *Computer Science for A Level (Hodder Education)*  
2. *OCR A and AS Level Computer Science (PG Online)*

Exam Term:

Pupils will review the Theory covered this term and fill in any gaps.

The main focus will be developing and documenting their exam based project.

Additional Theory Units may be covered, to include:

- Boolean Algebra
- Legal and Cultural Units