

Computer Science

KS3 Curriculum Information

In KS3 students will learn how to control computers and the technology around them. They will learn how to manipulate and think like computers.

Topics Covered

- E-Safety
- Python Programming
- Pseudo code
- Data representation
- Computational thinking
- Web design (HTML-CSS)
- Computer networks
- Digital Graphics
- Video Editing
- Audio programming

KS4 Curriculum Information

We currently offer a GCSE in Computer Science;

Unit 1 - Understanding Computer Science

EDUQAS will set an examination each session covering the following aspects of the specification content:

Computer Systems

Data Representation

Computer Software

Networks

Internet & Communications

Algorithms

Programming

Ethical, Social, and Legal Aspects

This external assessment will take the form of a paper-based examination.

Unit 2 - Solving Problems Using Computers

This assessment consists of a series of tasks set and marked by WJEC and completed on-screen by the candidate. These tasks will assess the practical application of programming knowledge.

Unit 3 - Developing Computing Solutions

This controlled assessment will give candidates the opportunity to develop a piece of work using programming software following a task brief from a choice of two issued by WJEC.

Key Trips

Science Museum and Apple Regent Street

RAYNESYear 7 - Computer Science Curriculum Plan

7n/Co1	7x/Co1	7x/Co2	7x/Co3	7z/Co1	7z/Co2	7z/Co3
Introduction to RPHS and the RaspberryPi computer						
		•	Assessment		•	
			Half Term			
Scratch						
			Assessment			
Christmas						
HTML basic web pages						
			Assessment			
			Half Term			
Spreadsheets						
Assessment						
Easter						
Image manipulation						
Assessment						
			Half Term			
Python						
Assessment						

RAYNES Year 8 - Computer Science Curriculum Plan

8x/Co1	8x/Co2	8x/Co3	8z/Co1	8z/Co2	8z/Co3
Introduction to RPHS and the RaspberryPi computer					
		Assess	sment		
		Half ⁻	Term		
Binary representation	Binary representation	Binary representation	Binary representation	Binary representation	Binary representation
		Assess	sment		
		Chris	tmas		
HTML and CSS					
		Assess	sment		
		Half ¹	Term		
Spreadsheets – Booking System					
Assessment					
Easter					
Scratch	Scratch	Scratch	Scratch	Scratch	Scratch
Assessment					
Half Term					
Python	Python	Python	Python	Python	Python
Assessment					



RAYNES Year 9 - Computer Science Curriculum Plan

9A/Co1	9B/Co1	9D/Co1		
Introduction to RPHS and the RaspberryPi computer	Introduction to RPHS and the RaspberryPi computer	Introduction to RPHS and the RaspberryPi computer		
	Assessment			
Data Representation and Computer Systems	Data Representation and Computer Systems	Data Representation and Computer Systems		
	Assessment			
	Half Term			
HTML sites and advanced CSS, Java script	HTML sites and advanced CSS, Java script	HTML sites and advanced CSS, Java script		
	Assessment			
	Christmas			
Planning and creating a computer programme in Python	Planning and creating a computer programme in Python	Planning and creating a computer programme in Python		
	Half Term			
	Assessment			
Easter				
Greenfoot	Greenfoot	Greenfoot		
Assessment				
Half Term				
Mobile phone Applications	Mobile phone Applications	Mobile phone Applications		
Assessment				



RAYNES Year 10 - Computer Science Curriculum Plan

10B/Co1	10D/Co1		
Introduction to RPHS and the RaspberryPi computer	Introduction to RPHS and the RaspberryPi computer		
Asses	sment		
Hardware	Hardware		
Asses	sment		
Logic and Arithmetic in Computers	Logic and Arithmetic in Computers		
Communication, Networks and the Internet	Communication, Networks and the Internet		
Asses	sment		
Organisation and structure of data, File design and data representation	Organisation and structure of data, File design and data representation		
Asses	sment		
Operating Systems Operating Systems			
Principles of programming and Software engineering	Principles of programming and Software engineering		
Asses	sment		
Greenfoot	Greenfoot		
Assessment			
Python	Python		
Assessment			



RAYNESYear 11 - Computer Science Curriculum Plan

11A/Co1	10D/Co1			
Introduction to RPHS and the RaspberryPi computer	Introduction to RPHS and the RaspberryPi computer			
Assessment				
Problem Solving using Computer, Algorithms and programming constructs	Problem Solving using Computer, Algorithms and programming constructs			
Asses	sment			
Half Term				
Controlled Assessment in class	Controlled Assessment in class			
Chris	rtmas			
Organisation and structure of data, File design and data representation	Organisation and structure of data, File design and data representation			
Hardware	Hardware			
Asses	sment			
Half [*] Operating Systems	Term Operating Systems			
Principles of programming and Software engineering	Principles of programming and Software engineering			
Communication, Networks and the Internet	Communication, Networks and the Internet			
Asses	sment			
Easter				
Greenfoot	Greenfoot			
Operating Systems	Operating Systems			
Logic and Arithmetic in Computers	Logic and Arithmetic in Computers			
Assessment				
Half	Term			
Exams	Exams			