

Computer Science

Date	Exams/ Assess	Unit(s)
4/9/23		Unit 9 – Programming in Python: Iteration (6 lessons) Online baseline test This module covers the third key programming construct, iteration, and the use of condition controlled loops. Throughout this module, students write and test their own code to solve coding challenges and develop their programming skills.
11/9/23		
18/9/23		
25/9/23		
2/10/23		
9/10/23		
16/10/23		
30/10/23		Unit 13 – Designing websites (6 lessons) While it is possible to use drag-and-drop-style software and templates to create a website, it is far more powerful to create your own by writing the source code yourself. This module looks at how HTML and CSS interact to define and display a website, together with the principles of good website design.
6/11/23		
13/11/23		
20/11/23		
27/11/23		
4/12/23		
11/12/23		Unit 12 – Sound and video editing (6 lessons) This module is broken into two parts. First, students will learn the fundamentals of using sound-editing software, including audio effects, to create a radio advert. Students will then create a soundtrack to a given brief. They will plan and create a video to go along with the soundtrack, learning about how to use video-editing software and how to add visual effects in the process.
1/1/24		
8/1/24		
15/1/24		
22/1/24		
29/1/24		
5/2/24		
12/2/24		Project 14 – Networking and the internet (6 lessons) Students learn about some of the everyday practicalities of networking, such as understanding the pros and cons of using public Wi-Fi and mobile data when away from home, as well as more fundamental concepts such as IP addressing, DNS and packet switching.
26/2/24		
4/3/24		
11/3/24		
18/3/24		
25/3/24		Project 1, 2 or 3 – (6 lessons) <u>Project 1</u> This project requires students to use the Python programming skills they have developed throughout the course to write two programs: an arithmetic quiz and a password strength program. It also introduces them to the iterative approach to project development, including testing at every stage and versioning. <u>Project 2</u> This project requires students to use the spreadsheet skills they have developed throughout the course to build a finance system for a hotel. They are given data about guests, hotel charges and costs and must use formulae to link data and perform calculations to populate an invoice and simple accounts. They are also asked to review the profitability of a number of scenarios.
15/4/24		
22/4/24		
29/4/24		
6/5/24		
13/5/24		
20/5/24		Project 1,2 or 3 – Multimedia (6 lessons) Online baseline test (Assessment week) <u>Project 3</u> This project requires students to use the image creation and audio- and video-editing skills they have learnt throughout the course to create a 30-second multi-media advert to promote a theme park. Students will be supplied with a range of sound and video files but can choose to source their own.
3/6/24		
10/6/24		
17/6/24		
24/6/24		
1/7/24		
8/7/24		
15/7/24		
		If a member of staff is absent and because Computer Science is only allocated one lesson per week, some units might over run.