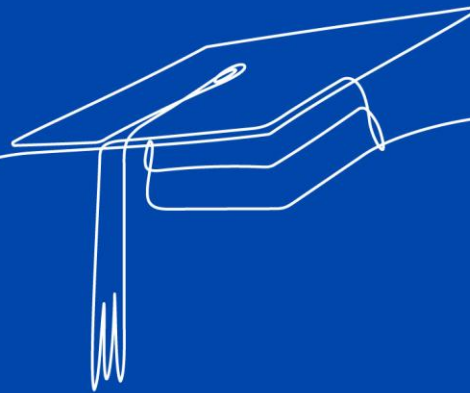


Computing curriculum overview



Computing at Tenbury High Ormiston Academy

Key stage 3, Years 7, 8 and 9

Our KS3 Computing curriculum equips pupils with the knowledge and skills they need to thrive in a digital world. We aim to develop confident, responsible, and creative users of computing technology who understand how computers work, how data is processed, and how digital systems shape modern life. Pupils learn the fundamentals of programming, computational thinking, and problem-solving, enabling them to design, test, and refine their own digital solutions.

We also teach pupils to use technology safely, respectfully, and critically. They explore issues such as online identity, digital footprints, and cybersecurity so they can make informed choices. By the end of KS3, our intent is for pupils to be digitally literate, adaptable, ready to apply their computing knowledge across the curriculum and beyond, and enthusiastic to study computer science further.

Key stage 4, Years 10 and 11

Our KS4 Computer Science curriculum is designed to prepare pupils for success in Computer Science GCSE using the Cambridge OCR exam board.

Building on strong foundations from KS3, pupils will learn to apply the core concepts in computer science. They will analyse problems in computational terms and devise creative solutions by designing, writing, testing and evaluating programs.

As well as leaving KS4 with a strong qualification in GCSE Computer Science, our intent is that this curriculum sets pupils up with the skills that will allow them to pursue a future in computer science.

GCSE course information

Exam board	OCR
Course	GCSE Computer Science (J277)
Specification and resources	https://www.ocr.org.uk/qualifications/gcse/computer-science-j277-from-2020/

Year 7

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Foundations for digital success	Block-based programming	Understanding computer systems	How do computers represent our world? (Data representation)	Introduction to text-based programming (Python)	Creative computing (Sound Engineering)

Throughout the year, we will also deliver online safety & digital wellbeing lessons to ensure students are responsible and prepared online citizens.

Assessments will take place in January and June and we will share revision information a few weeks before each assessment.

Year 8

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Understanding Computer Components & Networks	Web Development with HTML & CSS	Representing Data in Computer Systems	Computational Thinking, Algorithms and Logic	Text-Based Programming in Python	Creative Computing - Designing Vector Graphics

Throughout the year, we will also deliver online safety & digital wellbeing lessons to ensure students are responsible and prepared online citizens.

Assessments will take place in January and June and we will share revision information a few weeks before each assessment.

Year 9

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Cybersecurity and the Law	Data Science	Artificial Intelligence		Text-based programming with Python	3D Modelling & 3D Printing in Blender

Throughout the year, we will also deliver online safety & digital wellbeing lessons to ensure students are responsible and prepared online citizens.

Assessments will take place in January and June and we will share revision information a few weeks before each assessment.

Year 10 – GCSE Computer Science

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Python programming and fundamentals	Further Python programming	Computational thinking and languages	Robust programming & SQL	Systems architecture	Memory and storage

Assessments will take place in April and we will share revision information a few weeks before each assessment.

Year 11 – GCSE Computer Science

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Networks	Network Security	Issues in Technology	Revision	<i>Exams</i>	<i>Exams</i>

Mocks will take place in November and February and we will share revision information a few weeks before each assessment.