



# COMPUTING AT WADDESDON

## Curious

At Waddesdon, we encourage students to be curious about the ever-evolving world of technology. Our aim is to nurture inquisitive minds, ensuring students explore the impact of computing on modern society, problem-solving, and future innovations. We introduce students to a broad curriculum, helping them understand how technology shapes the world and encourage them to experiment with emerging technologies.

At KS3, students develop fundamental digital literacy and computational thinking skills through topics like cybersecurity, artificial intelligence, and app development. As they progress to KS4, students can choose between OCR GCSE Computer Science (J277) and OCR Cambridge National IT (J836). Depending on their pathway, they will explore topics such as programming, algorithms, augmented reality, and IT in the digital world. At KS5, we currently offer OCR Cambridge Technical IT Level 3 (A Level equivalent) studying topics such as virtual and augmented reality, social media and digital marketing and the IoE, preparing students for further study or careers in the tech industry.

We also believe in inspiring curiosity beyond the classroom. Through educational trips—such as Augmented Reality tours of Waddesdon Manor and visits to industry events like EGX Gaming Expo—students gain real-world insights into the field of computing and the opportunity to engage with employers and industry.

## Critical

Computing requires a critical approach to problem-solving, logical thinking, and evaluating digital tools. At every key stage, we equip students with the ability to analyse and refine their thinking, be that through programming challenges, understanding computer systems, or developing IT solutions.

Students studying Computer Science build strong problem-solving skills, tackling computational thinking, algorithm design, and systems architecture. With 41% of students achieving grades 9-7 in 2024, our department is dedicated to ensuring high standards and excellent outcomes. Meanwhile, our Cambridge National IT course broadens

access to digital skills, helping students critically assess and apply IT solutions in real-world contexts.

We take pride in exceeding expectations and are actively working to increase the number of students opting for either of these courses, particularly the number of girls studying Computing to surpass the national average.

## Creative

Computing is an inherently creative field, and we encourage students to explore innovative approaches to technology. Whether developing their own apps, developing a programme or designing branding projects, students engage in hands-on, creative problem-solving.

To support this creativity, we provide outstanding facilities, including four fully equipped IT suites and encourage students to attend homework club in these suites led by our Enrichment team. Beyond lessons, students can join our weekly KS3 Coding Club and Year 8 take part in our Computing STEM Day supported by industry experts.

Through a combination of academic excellence and engaging extracurricular opportunities, we ensure that students leave Waddesdon with the confidence, curiosity, and critical thinking skills needed to thrive in the digital world.

## The Team

Our Computing department is a highly experienced and enthusiastic team committed to delivering a dynamic and forward-thinking curriculum. Supported by a skilled IT technician and Network Manager, we provide a high-quality learning environment where students can explore and develop their digital skills.

With excellent results and a thriving student community, we are proud to be at the forefront of computing education at Waddesdon.

Whether students are learning fundamental digital skills or preparing for careers in technology, our department is dedicated to helping them succeed.

March 2025

