



Highsted Grammar School

The Computer Science curriculum

The Computer Science curriculum equips students to use computational thinking and creativity to understand and change the world. Computer Science is an essential part of the STEM curriculum and offers insights into both natural and artificial systems.

Computer Science fosters digital literacy by learning the principles of information and computation, how digital systems work and how to put this knowledge to use through programming.

Computing provides students with the knowledge and understanding to make informed choices about their own and others' use of technology.

Content

Years 7-9

Online safety, introduction to computing and programming, including the scripting language Python, as well as the ethical issues around our digital footprint and the implications of AI.

Years 10 & 11

Computer systems, computational thinking, algorithms and programming, and practical programming.

Sixth Form

The sixth form Computer Science curriculum builds on the KS4 curriculum with the study of the inner workings of the CPU, data exchange, software development, data types and legal and ethical issues. There is an emphasis on problem-solving in using computer programmes and algorithms, as well as a practical coding programming project.

Extra-curricular opportunities

CyberFirst Girls competition, Inspiring Digital Enterprise Award (iDEA).