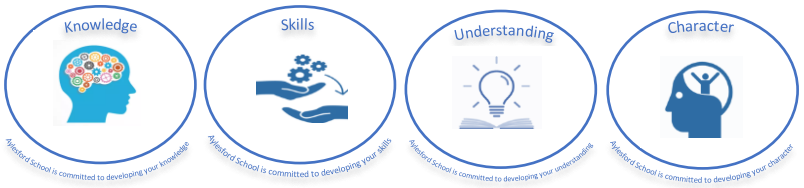
Aylesford School

COURAGE
CONFIDENCE
CHARACTER

Curriculum Intent, Implementation & Impact



Vision: We aim for our upcoming undeveloped computer science students to attain their GCSE and A levels with good grades and beyond by the time they leave Aylesford School. This enables them to be confident in computational problem solving and that they are ready to challenge their future either commercially or continuing at further and higher education.

Intent	Implementation	Impact
At the Aylesford school we believe that our students should have the opportunity to follow an IT and Computing curriculum that prepares them for life in modern Britain and take advantage of opportunity this can offer them in both Britain and the wider world. Computer science skills enables our student to engage positively in school and in the work place. Students take an active part in the design, development and creation of new technologies to be used in the world in which they live. The core of the curriculum subject is the understanding of how technology works, developed and utilise. Students develop clear and high-quality literacy and numeracy skills through software development, problem solving and evaluation skills. At the computing department, we provide a broad range of skills and experiences at KS3 which are then further developed as students enter KS4 and then extended to KS5.	**GCSE Computer Science** Students are introduced to core principles of computer science and develop skills in problem solving and computational thinking, while ensuring that students new to the subject are supported appropriately. Following on from more visual programming environments, programming skills are further developed using high level textual programming languages. Students develop knowledge and understanding of how technology can be used to help proactively with current issues that impact on modern society, preparing them for their next steps in today's global world <u>The principles and features that characterise our approach are:</u> ▪ Plan and develop software using the software design life cycle ▪ Use a range of software design techniques such as flowcharts, pseudocode and visualisation diagrams ▪ Develop key problem-solving skills of Abstraction, Decomposition and Algorithmic thinking ▪ Develop key skills and practical experience in script-based programming languages and be able to design, write and debug programs to solve non-simplistic problems ▪ To be able to think creatively, innovatively, analytically, logically and critically when solving problems ▪ Be able to make informed decisions on appropriate and efficient coding techniques such as sequence, selection, iteration and the use of functions ▪ To be able to design, Program, evaluate and refine solutions to problems **Creative iMedia** The Cambridge Nationals in Creative iMedia will equip learners with a range of creative iMedia skills and provide opportunities to develop, in context, desirable, transferable skills such as research, planning, and review, working with others and communicating creative concepts effectively. Through the use of these skills, students will ultimately be creating fit-for-purpose creative media products. The Cambridge Nationals in Creative iMedia will also challenge all students, including high attaining learners, by introducing them to demanding material and techniques; encouraging independence and creativity and providing tasks that engage with the most taxing aspects of the National Curriculum. <u>The principles and features that characterise our approach are:</u> ▪ Purpose and Components of Multipage Websites ▪ Internet Connection Methods ▪ Client Requirements & Target Audience	Students leave Aylesford school having gained an understanding of Computer Science and having developed technical and problem-solving knowledge and skills which will support further study and their first steps in the world of work. Successful Computer Science are able to continue the subject at A Level if they so choose, whilst making a positive contribution to the school's Progress 8 score. Computer Science 'A Level' students should be well placed to study for a degree in the subject, or to study logical / technical subjects in higher education.

	▪ Work Plan ▪ Visualisation Diagram ▪ Assets & Resources ▪ Legislation ▪ Creating a Multipage Website using Web Design Software ▪ Reviewing Multipage Websites	