

Computer Science A-level

Students in year 12 and 13 have 5 lessons a week.

Students will cover 12 topics in total for 2 exams with 8 topics for Component 1 and 4/5 for component 2. Students are required to complete a programming project of their own design under a small amount of teacher guidance. This is typically done over a mix of lessons and work at home. This is guided from the exam board as 80 hours.

- Component 1
 - Unit 1- Components of a computer and their uses
 - Unit 2- Systems software and applications generation
 - Unit 3- Software development
 - Unit 4 - Exchanging data
 - Unit 5- Network and web topologies
 - Unit 6- Data types
 - Unit 7- Data structures
 - Unit 9- Legal, moral, ethical and cultural issues
- Component 2
 - Unit 7- Data structures
 - Unit 8- Boolean algebra
 - Unit 9- Computational thinking
 - Unit 10- programming techniques
 - Unit 12- Algorithms
- Component 3
 - 80 hour guided independent programming task

Units are completed one at a time with an end of unit test completed on a regular basis. Students create their own revision material to cover the content. Key information is given to students to help expand their notes. These can be printed off or emailed home by the student.

Students complete a Component 1 full A-level style exam at the end of year 12. Students in year 13 sit a Component 1 and 2 exams at Christmas ready for their A-levels in the summer term.