

Year 12 A – Level Computer Science

LEARNING JOURNEY

End of Year 12

Start of Year 12

Applying to university through UCAS

UCAS

Think Ahead

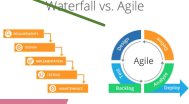


Advanced programming Techniques

Project analysis and Design

Project selection

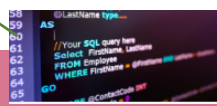
Software Development



Structured Query Language

Summer

Databases



Systems software

Computer Networks

Programming techniques (recursion & OOP)



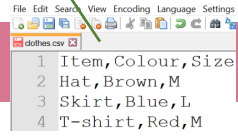
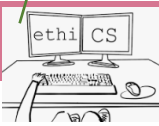
Morals and ethics

Reading Writing to files

Spring

Intermediate programming techniques

Data structures

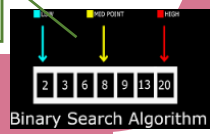


Binary Search

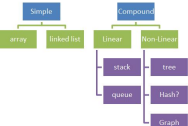
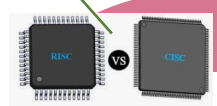
Computing related legislation

Computational methods

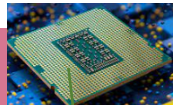
Programming techniques



Types of processor



Autumn



Linear Search

Structure and function of the processor

Programming Fundamentals

Input, output and storage

Summary:

The course starts with simple programming and a look at familiar pieces of hardware you use and know of but perhaps not in the way they are used in IT Systems as a whole. The expectations are that you steadily program throughout the year to such an extent that you can start developing an application yourself at the start of year 13 for the Non Exam Assessment project (20% of your marks) Theory is gradually introduced along with the responsibilities that computer scientists have to come to terms with with – the Law, Morals and Ethics.