YEAR 11 ROADMAP

Programming Techniques

What code is required to read and write to external files? Why are subroutines useful within our code? Why are arrays used with a computer program?

Algorithms

When would you use a Linear rather than a binary search algorithm? What are the main steps of a Bubble, Merge and Insertion sort algorithm? How could you display an algorithm visually?

System Security

What are the specific threats to a network? What specific methods of prevention could we use to prevent those threats?

System Software

What are the key functions of Operating Systems? What is the purpose of Utility software? How does Compression, Defragmentation, encryption and back-ups benefit a device?

Ethical, legal, environmental

Which stakeholders are affected by Ethical, Cultural, Environmental and Privacy issues related to technology?

When would Open Source or Proprietary software be used?

Producing Robust programs

How can input sanitisation, authentication, Maintainability of code (Comments, Indentation) and Testing (Iterative, final) be helpful in preventing erros?

Translators and languages

What's the difference between Machine code, assembly language and a high level programming language? What is the purpose of translators for your code? How useful are IDE's when creating a program?

Accelerated Progress

Topic revision, group and individual tuition, Weekly tests, Bespoke Booklets from mock exam (areas of weakness)

Exam Practice

Past paper questions, revision timetable, mark schemes and exam technique

EXAM SUCCESS!

TARGET GRADES MET AND EXCEEDED – PROGRESS MADE!