ATAM Academy

NEXT STEPS

Further Education
Getting ready for University

T level
BTEC
Apprenticeship

Apply for University through UCAS or alternative post 18 courses

Revise for and sit your A LEVELs feeling confident

Look at all the different options in your further education **Check out some amazing places**

Continue your lifelong love of learning as you transition to further or higher education

Enjoy the Summer Holiday.

YEAR 13

Autumn 1
Developing programming knowledge and use of IDE tools required to develop final project

Autumn 2
Languages
High level languages
Low level languages
The purpose of translators.
The characteristics of compiler and interpreters

Spring 1
:Introduction of Practical Programing task. Using high level programming languages 'Python'/C++,PHP or Java to create designs final project

Spring 2
Practical Programming developing Planning, Design, Coding, Testing and Evaluation techniques

Summer 1
Re-enforcing know of the IDE – Independent Development Environment. : Editors, Error diagnostics, Run time Environment and Translators

Summer 2
Final completion of project and revision

.Summer 2
Programming Paradigms
Procedural, Assembly and OOP

Spring 2
Software & development
Comparing the system life cycle, Waterfall, Agile development method

Spring 1
Application, Open/Close Source software. Translators, Interpreter, compilers and assembly languages
The stages of compilation

Autumn 2
Memory management (paging, segmentation & Virtual Memory
Interrupts ISR

Autumn 1
Computer Systems
Structure and function of the processor. RISC/CISC
GPU

Go to university to enhance your knowledge and get a degree

Summer 1
Computational thinking: Solving problems effectively

YEAR 12

Summer 2
ICT and the Law
Ethical and Cultural Issues

Spring 2
Data representation
Binary, ASCII, Binary Addition, Multiplication
HEX, Image and Sound

Spring 1
Networks and internet: Learning what a network is

Autumn 2
System Software
=

Autumn 1
Algorithms and debugging: Understanding what algorithms are and into to loops

Summer 1
Database: Learning to record, sort and filter data. Using SQL

Summer 2
Internet, and Web Technology HTML

YEAR 11

Spring 2
Security Network /IT security

Summer 1
Networking –
Client Server and Peer to Peer
Internet
DNS, IP Addressing/

Autumn 2
Advance Python Programming
Sequence, selection & Iterations. Functions, writing to file

Autumn 1
Computer Architecture
Start- up process the FDE cycle
Primary and secondary storage

Summer 2
Audacity/Sound Trap
Digital Sound manipulation

Spring 2
Programming – Python Next steps Understanding
Selection(if/else)
Iteration (for and while loops)

Spring 1
Photo manipulation

Autumn 2
Computing system and networks:

Autumn 1
Cyber Security
Data protection, Netiquette

YEAR 10

Spring 1
Computational Thinking# Search and Sorting .Algorithms

Spring 2
Programming – Introduction to text base programming using Python
Understanding variables, sequences of code and data types

Summer 1
Understanding Computers, Binary, ASCII, Binary Addition.

Summer 2
Multimedia Project
HTML
Website design: How web pages and sites are created and using Mark up language to add text and images

Getting ready for options

Autumn 2
Control System
Flowal

YEAR 9

Autumn 1
Cyber Crime
Internet security and online criminal activities

Summer 1
Multimedia Presentation

Summer 2
Introduction to Spreadsheets

8

7

Spring 2
Game Programming using Scratch using loops, variables and sensors

Spring 1
Computer Networks
LAN/WAN Network Hardware, Bandwidth, Network Protocols

Autumn 2
Understanding Computers Hardware and Software

Autumn 1
Collaborating online respectfully- Computer Safety and E-Safety