Computing Learning Journey
EYFS – Y13

Start an apprenticeship

Go to University

YEAR 13

Unit 1 and 2 Sum Exams

REVISION

Assess Unit 3

3.4 Evaluation

3.3 Developing the solution

2.1 Elements of computational thinking

2.3 Algorithms

1.5 Legal, moral, cultural and ethical issues

3.3 Developing the solution

3.2 Design of the solution

Testing

3.1 Analysis of the problem

REVISION

YEAR 12

1.1 The characteristics of contemporary processors, input, output and storage devices

1.4 Data Types, data structures and algorithms

1.2 Software and software development

2.2 Problem solving and programming

1.3 Exchanging data

REVISION

Testing

REVISION

Paper 1 & 2 Sum Exams

2.5 Translators and IDEs
What is a translator? What are compilers, interpreters and assemblers?

2.4 Computational Logic
Creating simple logic diagrams. Creating truth tables.

YEAR 11

2.2 Programming Techniques
Using python to program using Sequence, selection, iteration, arrays, files and functions

2.3 Producing Robust Programs
Understanding why defensive programming is necessary. Creating code which is easy to maintain. The purpose of testing

2.1 Algorithms
Reading and writing Algorithms
Correcting and Completing
Searching and Sorting

1.5 System Software
What are operating systems? What is utility software?

1.4 System Security
What forms of attack happen to computers and networks. How to prevent attacks.

1.6 Ethical, Legal and Cultural Concerns
What are the issues created and addressed by technology?

1.3 Network Topology, Protocol and Layers
What is a network and how is it set up? Why and for what purposes are protocols used?

1.2 Memory & Storage
What is RAM and ROM? Why do we need secondary storage?

1.2 Data Representation
How do computers represent data?

YEAR 10

Website Development
Using Dreamweaver, Photoshop and fireworks to create an interactive website

2.2 Programming Techniques
Using SQL to search for data. Using arrays to store data

1.1 Systems Architecture
What is the CPU? What are the common characteristics which affect performance? What are embedded systems?

YEAR 9

Computer Science 3
What is the CPU? How is data represented in a computer system? What is a a network?

Computer Science Programming 3
What is a variable? What is a subroutine?

Artificial Intelligence
What is AI? What are the impacts of AI? How does AI work?

iMedia Graphics 2
Using digital graphics software to manipulate images and produce a professional looking magazine.

Computer Science Programming 2
What is an algorithm and why are they important? How do you program using selection in python?

Computer Science Programming I
Using python turtle to program shapes

YEAR 8

Computer Science 2
What are the different legislations and how can they protect you and your data

Enterprise
Create a marketing plan for a bag business

Data Modelling I
How to use a spreadsheet, how to create graphs, how to create simple formula

iMedia Graphics 1
Using Digital Graphics Software to design and create a cereal box.

Computer Science 1
Input and output devices How the CPU works

YEAR 7

Digital Literacy – Retrieve Content
Create a quiz, fact file, and PowerPoint presentation

Digital Literacy
E-safety, touch typing, emails, networks and word processing

Data Modelling
Spreadsheets, use graphs, simulations, and databases

Computer Science 1
Passwords, searching for reliable information. Using basic Microsoft office applications

KS2

Digital Graphics - 2Paint
Use effects and repeat patterns to create a picture using 2Paint.

Coding
Test, debug, repeat commands, use variables and loops.

Interactive Multimedia Products
Create animations, use sounds, create blogs.

Data Modelling - Spreadsheets
Use a spreadsheet to add amounts and create a graph

Digital Literacy - Emails
Keeping information safe. Open and send and email

Representing Data
Represent data using images and pictograms.

Algorithms
Create, test and debug.

Representing Data
Explore, edit, combine and record sounds

YEAR 2

Digital Literacy - Searching
Safe searching information and produce leaflet to explain.

Algorithms
Create, repeat, add timer, test and debug.

Coding
Move objects and create commands.

YEAR 1

Digital Literacy – Exploring
Logging on to computers.

Digital Literacy – Familiarise
Play ICT games Take pictures on iPads using props.

EYFS