The Key Stage 3 Scheme of Learning will be delivered in three 1-hour lessons per fortnight.

Lessons will be a mix of practical and theoretical sessions, examining a variety of visual, aural and kinaesthetic activities. The programme of study is based on medium to long-term projects lasting between 1 and 1 half term (or the equivalent of). Projects will be divided into several smaller task-based projects with an overarching theme. This will then form the basis of assessment and review with students submitting a portfolio of evidence to demonstrate progress throughout the strands.

The delivery of the computing curriculum will focus on the fowling strands

- Digital Literacy
- E-safety and Digital Citizenship
- Computational Thinking
- Coding and Algorithms
- Hardware and Software
- Digital Content Creation
- Data, Knowledge and Information

British Values and Spiritual, Moral, Social and Cultural development are embedded into the units, where possible, ensuring that the topics encourage reflection and promote tolerance and respect. Throughout the units, the potential threats and issues relating to working and living online will be explored holistically and discreetly within a dedicated "e-safety" unit. Coverage will focus on the potential risks of sharing content online in an unsafe manner, as well as the issues relating to accessing inappropriate and potentially harmful material.

#### Year 7



### Induction

Pupils will be introduced to the systems and protocols used at Hebburn Comprehensive. Techers will use this to create a formative benchmark of student ability to support with planning and setting.

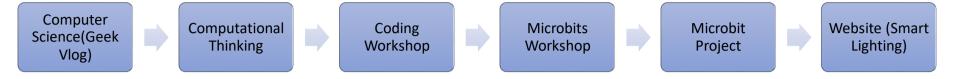
- Unit 1 Courtney's Computer Shack
  - Pupils will develop their digital literacy skills and use the topic of hardware and software to create specific artefacts for the given topic.
- Unit 2: Fudge 'N' Delicious Cupcakery
  Pupils will develop research and design skills to create a suite of publications for the given topic.
- Unit 3: Satine's Sandwiches

  Pupils will interrogate a database add/amend/delete customer orders and create a simple spreadsheet to record daily sales.
- Unit 4: Digital Safety
   Pupils will investigate and develop artefacts to promote digital wellbeing.
- Unit 5: Weeknite

  Pupils will develop a computer game character and investigate the different types of digital graphics used in a variety of situations.
- Unit 6: Weeknite

  Pupils will investigate the internet and create a simple webpage to promote their character designed in the previous unit.

#### Year 8



Unit 1 Geek Vlog

Pupils will develop their understanding of computer science by creating a vlog with different entries about binary, CPU and digital representation and sensors and encoding

Unit 2: Computational Thinking

Pupils will investigate the cornerstones of computation thinking and creating algorithms

• Unit 3: Coding workshop

Pupils will use the BBC microbit to develop their understanding of block based coding and python

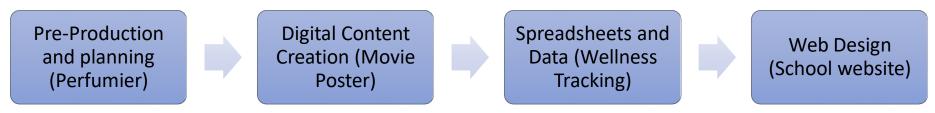
Unit 4: Microbits workshop
 Pupils will develop their abilities in using the microbit and electrical components to control real world systems with user generated code.

Unit 5: Micobit Project
 Pupils will work in teams to pitch, research and design and deliver a project

• Unit 6: Hue Smart Lighting

Pupils will create a three page website for a smart home product using HTML and CSS.

#### Year 9



The Year 9 SoL will move to broader project-based work, to allow pupils to become accustomed to the demands of Key Stage 4. More emphasis will be made on supporting students in creating evidence and documenting/sourcing work appropriately, as well as further developing skills required at Key Stage 4.

# Unit 1: Perfumier

Pupils will develop an advertising campaign for a new fragrance. Creating a brand and poster campaign.

#### Unit 2: Movie Poster

Pupils will develop a poster for a movie they must research, plan, acquire assets and design then evaluate their work.

#### Unit 3: Fitness Tracker

Pupils will develop their skills in creating a digital dashboard to record and track fitness information this may be heart rate, calories, activity as well as BMI and TDEE formulae so the spreadsheet can suggest how to remain or improve fitness.

#### Unit: 4 School website

Pupils will design and deliver a website using HTML and CSS to create a prototype website for the school.

Year 10 and 11. At Key stage 4 Students will study the BTEC Tech Award in Digital Information Technology. Students will be required to study three major components over the two year course

Component 1: User Interface Design Prinicples



Component 2: Collecting, Interpreting and analaysing data



Component 3: Modern Technologies

The first two components are assessed by the class teacher and moderated externally by the exam board. Pupils produce three pieces of work (submitted electronically), for each component, from a self-contained project outlined in a brief provided by the exam board.

## LA1.1: UI report

Pupils will research two different types of user interface and create a report identifying the different elements and how they contribute to the user experience.

# LA1.2: Design Specification and Project Plan

Pupils develop a project specification and project plan to create a prototype user interface for a given client.

## LA1.3: User Interface Prototype

Pupils implement their plan and create a user interface

### LA2.1 Data Presentation

Pupils will research and present how data is collected, verified and interpreted through a variety of different methodologies.

## LA 2.2: Spreadsheet Dashboard and Guide

Pupils create a guide on how to use typical spreadsheet software and create a dashboard for a health tracker style app to visualise health data.

### LA2.3: Spreadsheet Review

Pupils review how effectively they have worked to create their fitness dashboard,

## LA3.1 Exam Preparation: Modern Technologies

Pupils will undertake a 1.5 hour written exam relating to how modern technology in used in different areas of society such s work, leisure and education.

# Assessment Breakdown

| Year Group | Term 1                            |                 | Term 2            |                                    | Term 3                                     |                |
|------------|-----------------------------------|-----------------|-------------------|------------------------------------|--|----------------|
| 7          | About Me                          | Hardware and    | Café Newsletter   | Company                            | E-Safety Products                          | Computer Game  |
|            | Presentation                      | Software Report |                   | database                           |  | Webpage        |
| 8          | Hardware and Computational        |                 | Coding Tasks      | Microbit Group Project             |  | Smart Lighting |
|            | Software Blog                     | Thinking online | Booklet           |                                    |  | website        |
|            |                                   | exam            |                   |                                    |  |                |
| 9          | Fragrance Pre-Production Project  |                 | Movie Poster      | Spreadsheet and Database (Wellness |  | School Website |
|            |                                   |                 |                   | Tracker)                           |  |                |
| Year 10    | LA1.1: UI report                  |                 | LA1.2: Design     | LA1.3: User Interface Prototype    |  | LA2.1 Data     |
|            |                                   |                 | Specification and |                                    |  | Presentation   |
|            |                                   |                 | Project Plan      |                                    |  |                |
| Year 11    | LA 2.2: Spreadsheet Dashboard and |                 | LA2.3:            | LA3.1 Exam Prepar                  | A3.1 Exam Preparation: Modern Technologies |                |
|            | Guide                             |                 | Spreadsheet       |                                    |  |                |
|            |                                   |                 | Review            |                                    |  |                |