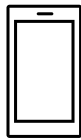# Computing Roadmap

**Key Concepts**
Algorithms
Computing systems
Creating media
Data and information
Design and development
Effective use of tools
Impact of Technology
Networks
Programming
Safety and security

## Year 11 Non-GCSE

IT and the world of work

Spreadsheets

Media

## Year 10

Security

Impacts on Society

Data Representations

Networks

Computer Systems

Algorithms

## Year 9

Animations

Data Science

Cybersecurity

Representations: going audiovisual

Python programming with sequences of data

Physical Computing Programming
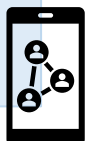
## Year 8

Design Vector Graphics

Computing Systems

Development for the Web

Representations: from clay to silicon

Mobile App Development

Intro to Python Programming

## Year 7

Impact of Technology – Collaborating Online Respectfully

Gaining Support for a cause

Networks: from semaphores to the Internet

Spreadsheets

Programming essentials in Scratch: Part 1

Programming essentials in Scratch: Part 2

To promote online safety, tailored sessions are delivered to all students three times during the academic year (Autumn Term, Spring Term and Summer Term).