



**HAILEY HALL SCHOOL**

Believe | Strive | Achieve

# Hailey Hall School Computing Curriculum Map

## **Computing Curriculum intent**

Technology is about the future; it is about changing the world around us to what it might be or should be. Computing especially encourages pupils to think creatively and collaboratively on their projects to challenge their skills and knowledge within the Computing curriculum. At Hailey Hall, we focus on ensuring the pupils are aware of how to use the internet safely, as well as using relevant software to encourage and prepare them for life beyond Hailey Hall in both further education and the workplace.

Within the Computing curriculum, we aim to provide cross-curricular links where possible such as Art and Design Technology, as well as incorporating English and Mathematics within their work. Within the curriculum, we endeavour to ensure the projects undertaken in Key Stage 3 support and prepare the pupils for the Key Stage 4 qualification.

In the Computing curriculum we aim to allow pupils to develop their skills and knowledge in the following areas:

- To progress the pupils' competence and confidence with basic Computing skills.
- To ensure pupils have an understanding of how to use the internet safely.
- To gain knowledge on a range of various pieces of software.
- To gain an understanding of how and why Computing is valuable to the pupils' future.
- To allow pupils to gain a nationally recognised qualification to support further education.

Throughout the projects undertaken by pupils, we endeavour to create links to the future and the world outside of Hailey Hall. In addition to subject specific principles, we aim to develop life skills and self-awareness, which will help the pupils become employable and gain attributes for the workplace. Skills and attributes that are encouraged include:

- Able to work as part of a team as well as an individual.
- Communication skills (speaking, listening, and presenting)
- Challenging and extending themselves
- Self-assessing
- Creativity
- Leadership skills

British values are an important aspect at Hailey Hall and within Computing. However, within the Computing lessons staff promote the views and opinions of each pupil ensuring they all have mutual respect between each other and accept their peers' faiths and beliefs. Staff regularly reinforce the importance of British values and how they are needed within the school, as well as the workplace in the future.

## **Year 7 ICT Computing**

**Why this subject is important:**

- Confident, creative and productive use of ICT is an essential skill for life.
- ICT skills are essential in order to gain employment in modern society.
- ICT gives access to ideas and experiences from a wide range of people, communities and cultures and allows you to work together and share information across the world.

**What you will learn:**

Unit name	Topics	Skills and understanding	Skills: Curriculum Links
Top Trumps	<p>Research suitable topics for our Top Trumps.</p> <p>Set of rules for our Top trump Categories.</p> <p>A complete set of Top Trump Cards.</p>	<p>Be able to successfully research and decide on what topic they would like their Top Trump Cards to be on.</p> <p>Be able to identify the statistics/rules included alongside each of their Top Trump Cards.</p> <p>To have successfully Completed a set of Top Trump Cards ready to use during a game through ICT Skills.</p>	<p>This will help develop research skills used in the future.</p> <p>This will help develop their skills on PowerPoint.</p> <p>This will continue to work on their overall ICT Skills/Creativity leading into the upcoming years.</p> <p>This will help develop their Numeracy and Literacy skills.</p>
E – Safety Staying Safe Online	<p>SMART Rules – internet safety</p> <p>Chat &amp; chat rooms</p> <p>Instant messaging</p> <p>Email, mobiles, social networking</p> <p>File-sharing</p> <p>Gaming, spam, viruses</p> <p>Passwords, backing up</p> <p>Looking after your device</p>	<p>Understand the meaning of e-safety.</p> <p>How to use the internet/Chatrooms safely.</p> <p>Be able to use the internet responsibly and safely; to avoid cyber-bullying.</p> <p>Be able to give the definition for e-safety and cyber-bullying.</p> <p>Be able to say what personal details are</p> <p>How to stay safe and avoid cyber bullying when using the internet.</p> <p>Discuss and come up with rules that should be followed when adding “friends” on social networking sites.</p>	<p>E-safety is a part of all year groups ensuring all students follow the school’s policy.</p> <p>Using a computer safely links in with the school policy and links to life outside of school.</p> <p>Adds a level of trust so we know the students are aware of how to use the computers safely and securely.</p>

	Online Safety Alliance Course	<p>Be able to decide whether or not to accept “friends” on your social networking profiles.</p> <p>Know how to use the internet/Chatrooms safely.</p> <p>Understanding the ways in which they can prevent and combat computer hackers and viruses.</p> <p>Be able to recognise copyrights implications.</p> <p>Be able to keep records of references and sources to websites when obtaining images from the internet.</p>	
Game Design-Scratch	<p>Understanding Scratch</p> <p>2D Game Design</p>	<p>In the process of creating interactive stories, games, and animations with Scratch, young people can learn important computational skills and concepts.</p> <p>They can learn problem-solving and project-design skills, such as reasoning logically, debugging problems, developing ideas from initial conception to completed project, and sustaining focus.</p> <p>They can also learn specific programming concepts, such as sequences, iteration, conditionals, variables, and data structures.</p>	<p>Scratch project that uses small levels of programming that can then be used later in life and will link directly with Lego Mindstorms in year 8. It will then link with the Kodu topic in year 9.</p> <p>Problem solving links to KS4 when working on their coursework and encountering issues.</p> <p>All three of these topics would help them if they chose to do iMedia in year 10 and 11 during the digital games module.</p>

**Promoting British Values:**

Democracy -

- Certain decisions on matters affecting the whole class are put to a vote
- We use voting as a system to encourage engagement in lessons, eg. Debates – for/against arguments, respecting views of others.

Rule Of Law –

- Whole school behaviour expectations/rules are constantly discussed, especially when they are breached, with individuals, pairs or small groups. We link behaviour to issues of morality and social interactions.

**How you will be assessed:**

You will be constantly assessed throughout the year with regular verbal and written feedback.

Each unit will end with a summative assessment in the form of a test, to assess knowledge or a practical task to assess knowledge and skills.

**How parents / carers can help:**

- Wherever possible and appropriate allow your son to complete work on a computer.
- Look at the work they are completing and act as reviewers, highlighting the good features of any work produced and suggesting ways the work could be improved.
- Talk about how technology has changed life during your lifetime.
- Ensure home learning is completed.

**Useful website and details of course books:**

<https://www.codecademy.com>

<http://my.dynamic-learning.co.uk/>

<https://teachcomputing.org/>

**Progression Routes and Career Opportunities:**

- Cambridge Nationals I Media Level 2
- College

**Who to contact and how if you have a query regarding your child:**

Name	Position	Email Address	Telephone
Amy Meech	ICT Subject Lead	AMeech@haileyhall.herts.sch.uk	01992 465208

## Year 8 Computing

### Why this subject is important:

- Confident, creative and productive use of ICT is an essential skill for life
- ICT skills are essential in order to gain employment in modern society
- ICT gives access to ideas and experiences from a wide range of people, communities and cultures, and allows you to work together and share information across the world.

### What you will learn:

Unit name	Topics	Skills and understanding	Skills: Curriculum Links
Animation	<p>Creating a Pivot animation.</p> <p>Use of cameras to capture stop motion project.</p>	<p>Pivot animation skills and creation.</p> <p>Introduction into the use of cameras and different settings on a camera.</p> <p>Knowledge in animation and video editing.</p>	<p>The use of cameras can be taken to the year 9 photoshop project as they can use their own images and edit them.</p> <p>Then take that further knowledge into year 10 and 11 if they choose the iMedia course.</p>
Pre-Production skills	<p>Pupils will learn about how to plan pre-production effectively including understanding of client requirements and reviewing pre-production briefs.</p> <p>Understanding the purpose and content of pre-production</p> <ul style="list-style-type: none"> <li>• Being able to plan pre-production.</li> <li>• Being able to produce and review pre-production documents.</li> </ul>	<p>Mood boards (e.g. ideas and concepts for a new creative media product development, assisting the generation of ideas)</p> <p>Mind maps/spider diagrams (e.g. to show development routes and options for an idea, or component parts and resources needed for a creative media product)</p> <p>Visualisation diagrams (e.g. for still images and graphics)</p> <p>Storyboards (e.g. for use with video, animation)</p> <p>Scripts (e.g. for a video production, voiceover, comic book or computer game)</p> <p>Interpret client requirements for pre-production (e.g. purpose, theme, style, genre, content) based on a specific brief (e.g. by client discussion, reviewing a</p>	<p>The understanding of pre-production skills will be taken into their iMedia course if they chose for year 10 and 11 as a small portion of the course.</p> <p>Knowledge of the legislation within images and video linking to iMedia year 10 and 11.</p>

		written brief, script or specification) Identify timescales for production based on target audience and end user requirements. How to conduct and analyse research for a creative digital media product	
Lego Mindstorms	Programming a robot to follow a path created by students.	Knowledge and understanding of how to program.  Hardware knowledge of robots and computers.  Functionality of the robot and using it to its best abilities.	Builds on the Scratch project from year 7.  Lego Mindstorms links with year 9's Kodu project as well as the digital game design module in year 10 and 11 if they are to choose iMedia.

**How you will be assessed:**

You will be constantly assessed throughout the year with regular verbal and written feedback.

All work will be assessed in line with the Life Without Levels subject and topic documents to ensure consistent assessment.

**How parents / carers can help:**

- Wherever possible and appropriate allow your son to complete work on a computer
- Look at the work they are completing and act as reviewers, highlighting the good features of any work produced and suggesting ways the work could be improved
- Talk about how technology has changed life during your lifetime
- Ensure home learning is completed

**Useful website and details of course books:**

<https://www.codecademy.com>  
<http://my.dynamic-learning.co.uk/>  
<https://teachcomputing.org/>

### Progression Routes and Career Opportunities:

- Cambridge Nationals iMedia Level 2
- College

### Who to contact and how if you have a query regarding your child:

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Amy Meech	ICT Subject Lead	AMeech@haileyhall.herts.sch.uk	01992 465208

### Year 9 Computing

#### Why this subject is important:

- Confident, creative and productive use of ICT is an essential skill for life
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#### What you will learn:

Unit name	Topics	Skills and understanding	Skills: Curriculum Links
Digital game creation – introduction to Kodu.	Creating a crossroad game	Basic understanding of designing and programming a game. Introduction to Kodu software and the capabilities and limitations of the software.	Directly links to the year 10 and 11 iMedia course. The digital game design module that is included in the course.
Digital Graphics	Introduction to photoshop.	Know how to use Paint.net to change images and improve their appearance. Adding layers to an image to enhance the depth of the picture. Changing effects of the image to alter the tone of the image.	This will directly link with the digital graphics module in the year 10 and 11 iMedia course.  Researching and sourcing images linked to Year 7 summer project.



<p>Creating a website</p>	<p>What features are included on websites?</p> <p>Feedback of popular Websites.</p> <p>Website Theme Board</p> <p>Plan of Action</p> <p>Creating own Website</p>	<p>To be able to identify what needs to be included to make a successful website.</p> <p>To be able to visually layout how they wish their website to look.</p> <p>To be able to successfully Create their own website of their choice.</p>	<p>To be able to provide feedback/analyse.</p> <p>To be able to identify strengths/weaknesses.</p> <p>Decision Making skills.</p> <p>To be able to make a plan.</p> <p>To be able to go through with a plan and create their own product.</p>
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**Promoting British Values:**

**Democracy -**

- Certain decisions on matters affecting the whole class are put to a vote
- We use voting as a system to encourage engagement in lessons, eg. Debates– for/against arguments, respecting views of others.

**Rule Of Law –**

- Whole school behaviour expectations/rules are constantly discussed, especially when they are breached, with individuals, pairs or small groups. We link behaviour to issues of morality and social interactions.

**Who to contact and how if you have a query regarding your child:**

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Amy Meech	ICT Subject Lead	AMeech@haileyhall.herts.sch.uk	01992 465208

**Year 10 ICT Cambridge Nationals – Level 2 iMedia**

**Why this subject is important:**

- Confident, creative and productive use of ICT is an essential skill for life
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- ICT gives access to ideas and experiences from a wide range of people, communities and cultures, and allows you to work together and share information across the world.

**What you will learn:**

Unit name	Topics	Skills and understanding	Sills: Curriculum Links
<b>Unit R094: Visual identity and digital graphic</b>	<p>In this unit you will learn to how to develop visual identities for clients and use the concepts of graphic design to create original digital graphics to engage target audiences.</p> <p>Topics include:</p> <p>Develop visual identity</p> <p>Plan digital graphics for products</p> <p>Create visual identity and digital graphics</p>	<p>Produce a summary of the importance of visual identities for a company. Identify different types of visual identities.</p> <p>Develop an understanding of editing software and how they are used to create a visual identity.</p> <p>Interpret the client brief and come up with their own design for a digital graphic.</p> <p>Demonstrate key aspects of creating a digital graphic.</p> <p>Justify your design choices and why the visual identity is fit for purpose.</p> <p>Create your own assets or source assets to use in your graphic.</p> <p>Create, using image editing software, your</p>	<p>Links to the iMedia course, doing this will go towards their final grade.</p> <p>Builds on KS3 learning and skills developed.</p> <p>This will then help in further education.</p>

		<p>own digital graphic that meets the client brief.</p> <p>Modify image sizes to make sure they are compatible with your software.</p> <p>Save digital graphic as suitable file formats.</p>	
<b>Unit R097: Interactive Digital Media</b>	<p>In this unit you will learn how to plan, create and review interactive digital media products. Topics include:</p> <p>Plan interactive digital media</p> <p>Create interactive digital media</p> <p>Review interactive digital media</p>		

**How you will be assessed:**

R094	Creating Digital Graphics	Internal	25%	30 hrs
R097	Interactive Digital Media	Internal	35%	30 hrs

Grades awarded: Pass, Merit, Distinction and Distinction\*

The controlled assessment will be internally assessed and externally moderated. Your teacher will assess you at the end of each unit.

**How parents / carers can help:**

- Talk to your child about what they are learning in lessons, perhaps getting them to teach you what they have been learning.
- Encourage your child to use the internet if he has access to this to do research.
- Encourage your child to revise each week for examinations.
- Ensure your child meets all the coursework deadlines.
- Provide them with a quiet place to do homework and revision.
- Talk about how technology has changed life during your lifetime.

**Useful website and details of course books:**[www.bcbitesize.co.uk](http://www.bcbitesize.co.uk)<http://www.ocr.org.uk><https://www.codecademy.com><http://my.dynamic-learning.co.uk><https://teachcomputing.org/>**Progression routes and career opportunities:**

College.

Sixth form.

**Who to contact and how if you have a query regarding your child:**

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Amy Meech	ICT Subject Lead	AMeech@haileyhall.herts.sch.uk	01992 465208

**Year 11 ICT Cambridge Nationals – Level 2 iMedia****Why this subject is important:**

- Confident, creative and productive use of ICT is an essential skill for life
- ICT skills are essential in order to gain employment in modern society
- ICT gives access to ideas and experiences from a wide range of people, communities and cultures, and allows you to work together and share information across the world.

**What you will learn:**

Unit name	Topics	Skills and understanding	Sills: Curriculum Links
<b>R093: Creative iMedia in the Media Industry</b>	This is assessed by taking an exam. In this unit you will learn about the media industry, digital media products, how they are planned, and the media codes which are used to convey meaning, create impact and engage audiences. Topics include: The media industry  Factors influencing product design  Pre-production planning  Distribution considerations		

**How you will be assessed:**

R093 Creative iMedia in the industry

External 40% 1hr 15 mins

Grades awarded: Pass, Merit, Distinction and Distinction\*

The exam will be externally moderated.

**How parents / carers can help:**

- Talk to your child about what they are learning in lessons, perhaps getting them to teach you what they have been learning.
- Encourage your child to use the internet if he has access to this to do research.
- Encourage your child to revise each week for examinations.
- Ensure your child meets all the coursework deadlines.
- Provide them with a quiet place to do homework and revision
- Talk about how technology has changed life during your lifetime

**Useful website and details of course books:**

[www.bcbitesize.co.uk](http://www.bcbitesize.co.uk)

<http://www.ocr.org.uk>

<https://www.codecademy.com>

<http://my.dynamic-learning.co.uk>

<https://teachcomputing.org/>

**Progression routes and career opportunities:**

College.

Sixth form.

**Who to contact and how if you have a query regarding your child:**

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Amy Meech	ICT Subject Lead	AMeech@haileyhall.herts.sch.uk	01992 465208