

# Hailey Hall School Computing Curriculum Map

## Computing Curriculum intent (KS3)

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.

At KS3, our ICT curriculum is intentionally designed with short and engaging tasks that SEMH boys will find compelling. We aim to:

- Foster digital literacy, ensuring students are equipped with essential ICT skills through interactive and brief activities. Encourage creativity, problem-solving, and critical thinking through ICT projects that are segmented into manageable components.
- Promote digital citizenship, online safety, and staying safe online, empowering students to use technology responsibly through concise lessons. Tailor our teaching methods to accommodate diverse learning styles, with a focus on brief, focused tasks that match the attention span of SEMH students.
- Develop transferable skills that enhance personal and academic progress, using practical, short, and sharp tasks as building blocks.

#### Curriculum Implementation:

• Deliver a balanced curriculum, covering key aspects of the National Curriculum for Computing, including coding, digital literacy, information technology, e-safety, and staying

safe online, through short, focused activities. Utilise a variety of teaching approaches, including practical activities, group work, and individual projects that SEMH boys will find engaging and attainable. Provide differentiated instruction and support, including one-on-one guidance and assistive technologies, with a focus on short, sharp tasks that align with the learning style of SEMH students.

• Embed digital citizenship, e-safety, and staying safe online into all lessons through concise, relatable scenarios, promoting responsible digital behavior. Encourage creativity through project-based learning that breaks down into bite-sized steps, enabling students to apply ICT skills in real-world contexts with manageable components. Foster a supportive and inclusive classroom environment, ensuring students feel safe and valued, particularly in the context of short and achievable tasks

#### Curriculum Impact:

- Improved digital literacy skills, including proficiency in using software and digital tools, achieved through short, engaging activities. Enhanced problem-solving and critical thinking abilities, reflected in students' project outcomes that are built upon manageable components.
- Increased awareness of online safety, e-safety, and responsible digital behaviour, reducing risks associated with online activity through relatable scenarios and short, focused lessons. Progress in personal development, including improved self-esteem and communication skills, nurtured by achievable tasks.
- Evidence of academic progress through assessments and projects that highlight the development of ICT skills and application of knowledge, all stemming from the foundation of short and engaging tasks. Transferable skills that contribute to overall personal and academic growth, facilitated by a curriculum built on the premise of short, sharp tasks that SEMH boys find engaging and attainable.

# 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.

Unit name	Topics	Skills and understanding	Skills:
			Curriculum Links
E – Safety Staying Safe Online	internet safety	Understand the meaning of e- safety.	E-safety is a part of all year groups ensuring all students follow the school's policy.
Offilitie	Chat & chat	How to use the	lollow the school's policy.
	rooms	internet/Chatrooms safely.	Using a computer safely links in with the school policy and
	Instant messaging	Be able to use the internet responsibly and safely; to avoid	links to life outside of school.
	Email, mobiles,	cyber-bullying.	Adds a level of trust so we know the students are aware
	social	Be able to give the definition for	of how to use the computers
	networking	e-safety and cyber-bullying.	safely and securely.
	File-sharing	Be able to say what personal details are	
	Gaming, spam,	How to stay safe and avoid cyber	
	viruses	bullying when using the internet.	
	Passwords, backing up	Discuss and come up with rules that should be followed when adding "friends" on social	
	Looking after your device	networking sites.	
		Be able to decide whether or	
	Online Safety Alliance Course	not to accept "friends" on your social networking profiles.	
		Know how to use the	
		internet/Chatrooms safely.	
		Understanding the ways in which	
		they can prevent and combat computer hackers and viruses.	
		<u>l</u>	

		Be able to recognise copyrights implications.  Be able to keep records of references and sources to websites when obtaining images	
Game Design	Understanding	from the internet. In the process of creating	Scratch project that uses small
Scratch	Scratch 2D Game Design	•	levels of programming that can then be used later in life and will link directly with Lego Mindstorms in year 8. It will
		concepts.	then link with the Kodu topic in year 9.
		reasoning logically, debugging	Problem solving links to KS4 when working on their coursework and encountering issues.
		'	All three of these topics would help them if they chose to do iMedia in year 10 and 11 during the digital games module.
Top Trumps	Research suitable topics for our Top Trumps.	Be able to successfully research and decide on what topic they would like their Top Trump Cards to be on.	This will help develop research skills used in the future.
		Be able to identify the statistics/rules included	This will help develop their skills on PowerPoint.
	Categories.	•	This will continue to work on their overall ICT Skills/Creativity leading into
	A complete set of Top Trump Cards.	To have successfully Completed a set of Top Trump Cards ready to use during a game through ICT Skills.	· · · · · · · · · · · · · · · · · · ·

#### 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/

#### **Progression Routes and Career Opportunities:**

Cambridge Nationals iMedia Level 2 College

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

Name	Key Stage	Position	Email Address	Tel

Serdal	KS3	Assistant	syanmaz@haileyhall.herts.sch.uk	01992
Yanmaz		Headteacher ICT		465208
		Teacher		

# 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.

Unit name	Topics	Skills and understanding	Skills: Curriculum Links
Animation	Creating a Pivot animation.  Use of cameras to capture stop motion project.	Pivot animation skills and creation.  Introduction into the use of cameras and different settings on a camera.  Knowledge in animation and video editing.	The use of cameras can be taken to the year 9 photoshop project as they can use their own images and edit them.  Then take that further knowledge into year 10 and 11 if they choose the iMedia course.
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.
Pre- Production skills	how to plan pre-	Mood boards (e.g. ideas and concepts for a new creative media product development, assisting the generation of ideas) Mind maps/spider diagrams (e.g. to show development routes and options for an idea, or	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.

Understanding	component parts and	Knowledge of the
Understanding		Knowledge of the
the purpose and	resources needed for a	legislation within
content of pre-	creative media product)	images and video
production	_	linking to IMedia year
	(e.g. for still images and	10 and 11.
<ul> <li>Being able to</li> </ul>	graphics)	
plan pre-	Storyboards (e.g. for use	
production.	with video, animation)	
	Scripts (e.g. for a video	
<ul> <li>Being able to</li> </ul>	production, voiceover,	
produce and	comic book or computer	
review pre-	game)	
production	Interpret client	
documents.	requirements for pre-	
	production (e.g. purpose,	
	theme, style, genre,	
	content) based on a	
	specific brief (e.g. by	
	client discussion,	
	reviewing a 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	

## 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/

#### Progression Routes and Career Opportunities:

Cambridge Nationals iMedia Level 2 College

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

Name	Key Stage	Position	Email Address	Tel
Serdal Yanmaz		Assistant Headteacher ICT Teacher	syanmaz@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
- 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.

Unit name	Topics	Skills and understanding	Skills: Curriculum Links
Creating a website	What features are included on websites?	To be able to identify what needs to be	To be able to provide feedback/analyse.
	Feedback of popular	included to make a successful	To be able to identify strengths/weaknesses.
	Websites.	website.	Decision Making skills.

	Website Theme Board  Plan of Action  Creating own Website	To be able to visually layout how they wish their website to look.  To be able to successfully Create their own website of their choice.	To be able to make a plan.  To be able to go through with a plan and create their own product.
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.	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.

Changing effects of the image to	
alter the tone of	
the image.	

# 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:

Name	Key Stage	Position	Email Address	Tel
Serdal Yanmaz		Assistant Headteacher ICT Teacher	syanmaz@haileyhall.herts.sch.uk	01992 465208

#### <u>Year 10 and 11 ICT – Creative iMedia: Cambridge Nationals – Level 2 iMedia</u>

#### Key Stage 4 (KS4) - OCR Level1/Level2 in Creative iMedia

All pupils in Key Stage 4 that select Creative iMedia as an option for Years 10 and 11 will study the Cambridge Nationals Level 1/2 Creative iMedia Course. Below is an outline of the curriculum intent, implementation and impact, and curriculum mapping breakdown of the units of work that are studied. In Year 10 the focus is on the non-exam assessed coursework units (RO94 and RO97), while the focus in year 11 is the exam unit (RO93), which is sat at the end of Year 11.

#### Curriculum Intent:

At KS4, our curriculum is aligned with the OCR Level1/Level2 in Creative iMedia qualification, with a focus on preparing students for further education, employment, or training opportunities post-16. Our intent is to:

- Offer a practical and relevant qualification that not only enriches the learning experience but also opens doors to future pathways.
- Tailor the curriculum to the specific needs and abilities of SEMH students, providing appropriate support and guidance to facilitate success.
- Develop skills in digital media, graphic design, and interactive media creation, preparing students for future careers or further studies.
- Foster independence and self-motivation, encouraging students to take ownership of their learning and future aspirations.
- Monitor progress through regular assessment, ensuring students are well-prepared for their final exams and coursework while keeping an eye on post-16 opportunities.

#### Curriculum Implementation:

- Deliver the OCR Level1/Level2 in Creative iMedia qualification, covering topics such as digital graphics, website creation, and interactive media, while emphasizing their practical applications in post-16 pathways.
- Provide additional support and interventions for SEMH students, including personalised guidance on potential post-16 routes, ensuring they are well-informed and prepared for the next steps.
- Foster independence by setting individualized targets that align with post-16 aspirations, motivating students to take ownership of their future education or employment.
- Utilize practical, hands-on activities and real-world projects that not only enhance digital media skills but also demonstrate how these skills can be applied in various post-16 contexts.
- Offer guidance and support throughout the coursework and examination process, including discussions about post-16 choices and applications.

#### **Curriculum Impact:**

- Attainment of OCR Level1/Level2 in Creative iMedia qualification, providing students with a valuable credential to support their post-16 endeavours.
- Enhanced digital media skills, including proficiency in graphic design, web development, and interactive media, directly applicable to further education or employment. Improved self-motivation and independent learning skills, vital for success in post-16 settings.

- Personalized support and guidance on post-16 options, ensuring that SEMH students are well-informed and prepared for their next steps.
- Positive progress in personal development and self-confidence, reflected in coursework and assessment outcomes that align with post-16 aspirations.
- A curriculum that not only equips students with relevant digital media skills but also facilitates informed decisions and applications for further education, employment, or training opportunities post-16.

## 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.

Unit name	Topics	Skills and understanding	Skills: Curriculum Links
Visual learn identity and visual digital clien graphic (Year 10) concidesign digital incorrident target	n how to develop al identities for ats. They will also a to apply the cepts of graphic gn to create original al graphics which rporate your visual tity to engage a et audience.  -Exam Assessed rsework	importance of visual identities for a company. Identify different types of visual identities.  Develop an understanding of editing software and how they are used to create a visual identity.  Interpret the client brief and come up with their own design for a digital graphic.  Demonstrate key aspects of creating a digital graphic.  Justify your design choices and why the visual identity is fit for	Links to the iMedia course, doing this will go towards their final grade.  Builds on KS3 learning and skills developed.  This will then help in further education.  Links with employability and PSHCE (online safety and legislation).

		L 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
		Save digital graphic as suitable file formats.	
ctive Digital Media (Year 10)	In this unit you will study the different types of interactive digital media products. Content, features and conventions, and legislation related to interactive digital media products will also be covered.  Non-Exam Assessed Coursework	Types of interactive digital media In this unit, students need to know the different formats interactive digital media take and how different formats may have different purposes and audiences. They also need to understand how users may access interactive media products and how this would impact on its format.  Content of interactive digital media Whichever format the interactive digital media takes the content generally stays the same. Students	

All this teaching content is vital to their success in this unit, but students do not need to be able write about the theory of the conventions. As it is a Cambridge National qualification they need to be able to apply their knowledge and show it within the interactive digital product they produce as part of the NEA. They need to have exposure to a wide variety of interactive digital products to inspire and enthuse them to be able to create their own original, creative products which match conventions.

Pre-production and planning documentation
The mandatory examined unit R093 includes synoptic topic areas such as client requirements and audience demographics as well documents used to support ideas generation and planning media products. This needs to be taught before or as part of this unit.
Without it, students will struggle do well in the NEA as it forms the basis of task 1.

Much of the content of R093 applies to all media products but then needs to be applied in this unit. For example, the teaching content for topic area 3.2 in R093 covers mind maps and mood boards. Students should have the understanding and skills to create a mind map, for example to identify content ideas for their interactive digital product to meet the client brief. They may choose to use a mood board: for example, they could use one to portray their vision for the look and feel of their product.

When it comes to the preproduction planning for the interactive digital product, the NEA will ask them to use a range of techniques to plan their interface. They should be able to choose from wire frame, storyboards and navigation and hierarchy diagrams. Therefore, in the teaching phase it is important they have had chance to practice these methods. You could give them a simple client brief for a game or website and ask them to produce pre-production documentation using each method. It is important that the designs are detailed enough that a third party would be able to use it to create their product. In the NEA the students will be expected to independently generate preproduction documents for their interactive digital product. Students should also be taught to source assets and provide details in an assets table. We provide a template for this and students should be taught to complete it and strongly encouraged to use it in their NEA task. There is no requirement for project management, such as Gantt charts, in this unit. All the planning students need to produce is around showing their creative ideas. Topic Area 2: Create interactive digital media Unit R093 Exam Assessed The specification is split into two Links to the iMedia unit. course, doing this columns, Teaching content and will go towards Breadth and depth required. The PO1 their final grade. teaching content includes everything that needs to be

Recall knowledge taught. The breadth and depth Builds on KS3 and show learning and skills column clarifies the range of understanding developed. knowledge and understanding that may be assessed in the exam. PO2 This will then help It also helpfully lists what a topic Apply knowledge in further 'does not include' which tells you and understanding education. what we do not need you to teach and therefore will not be tested in PO3 Links with the exam. Analyse and employability and PSHCE (online evaluate safety and knowledge, For all knowledge questions, understanding and legislation). students need to be able to performance identify or recognise a given item and use direct recall to answer the question. Any item that should be taught as knowledge will start with the word "know" in the breadth and depth column. For example, teaching content 2.3, Audience demographics and segmentation in the specification is as follows:

#### How you will be assessed:

R093	Creative iMedia in the industry	External	40%	1hr 15 mins
R094	Creating Digital Graphics	Internal	30%	30 hrs
R097	Interactive Digital Media	Internal	30%	30 hrs

Grades awarded: Level 1 or Level 2 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.bbcbitesize.co.uk

http://www.ocr.org.uk

https://www.codecademy.com

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

# Progression routes and career opportunities:

College.

Sixth form.

Apprenticeships

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

Name	Key Stage	Position	Email Address	Tel
Serdal	KS4 (Year	Assistant Headteacher	syanmaz@haileyhall.herts.sch.uk	01992
Yanmaz	10 & 11)	ICT Teacher		465208