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
E – Safety Staying Safe Online	SMART Rules – internet safety Chat & chat rooms Instant messaging Email, mobiles, social networking File-sharing Gaming, spam, viruses Passwords, backing up Looking after your device Online Safety Alliance Course	Understand the meaning of e-safety. How to use the internet/Chatrooms safely. Be able to use the internet responsibly and safely; to avoid cyber-bullying. Be able to give the definition for e-safety and cyber-bullying. Be able to say what personal details are How to stay safe and avoid cyber bullying when using the internet. Discuss and come up with rules that should be followed when adding "friends" on social networking sites. Be able to decide whether or 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. Be able to recognise copyrights implications.	E-safety is a part of all year groups ensuring all students follow the school's policy. Using a computer safely links in with the school policy and links to life outside of school. Adds a level of trust so we know the students are aware of how to use the computers safely and securely.

		Be able to keep records of references and sources to websites when obtaining images from the internet.	
Game Design Scratch	Understanding Scratch 2D Game Design	In the process of creating interactive stories, games, and animations with Scratch, young people can learn important computational skills and concepts. 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. They can also learn specific programming concepts, such as sequences, iteration, conditionals, variables, and data structures.	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. 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. Set of rules for our Top trump Categories. A complete set of Top Trump Cards.	Be able to successfully research and decide on what topic they would like their Top Trump Cards to be on. Be able to identify the statistics/rules included alongside each of their Top Trump Cards. To have successfully Completed a set of Top Trump Cards ready to use during a game through ICT Skills.	This will help develop research skills used in the future. This will help develop their skills on PowerPoint. This will continue to work on their overall ICT Skills/Creativity leading into the upcoming years. This will help develop their Numeracy and Literacy 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	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	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 Spike	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	Pupils will learn about how to plan pre-production effectively including understanding of client requirements and reviewing pre-production briefs. Understanding the purpose and content of pre-production	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 component parts and resources needed for a creative media product) Visualisation diagrams (e.g. for still images and graphics) Storyboards (e.g. for use with video, animation)	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. Knowledge of the legislation within images and video linking to IMedia year 10 and 11.

	• Being able to plan pre-production. • Being able to produce and review pre-production documents.	Scripts (e.g. for a video production, voiceover, comic book or computer game) 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 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
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Progression Routes and Career Opportunities:

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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
- 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
Creating a website	What features are included on websites? Feedback of popular Websites. Website Theme Board Plan of Action Creating own Website	To be able to identify what needs to be included to make a successful 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 provide feedback/analyse. To be able to identify strengths/weaknesses. Decision Making skills. 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. 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.

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	Position	Email Address	Telephone
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
- 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
Unit R094: Visual identity and digital graphic	In this unit pupils will learn how to develop visual identities for clients. They will also learn to apply the concepts of graphic design to create original digital graphics which incorporate your visual identity to engage a target audience.	Produce a summary of the 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 purpose. Create your own assets or source assets to use in your graphic. Create, using image editing software, your own digital graphic that meets the client brief. Modify image sizes to make sure they are compatible with your software. Save digital graphic as suitable file formats.	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.
Unit R093: The Media	Pupils will learn about how to plan pre-production effectively including	Mood boards (e.g. ideas and concepts for a new creative media product	Links to the iMedia course, doing this will go towards their final grade.

Industry (Exam Topics)	understanding of client requirements and reviewing pre-production briefs. Understanding the purpose and content of pre-production Being able to plan pre-production. Being able to produce and review pre-production documents.	development, assisting the generation of ideas) 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) Visualisation diagrams (e.g. for still images and graphics) Storyboards (e.g. for use with video, animation) Scripts (e.g. for a video production, voiceover, comic book or computer game) 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 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	Builds on KS3 learning and skills developed. This will then help in further education.

How you will be assessed:

R093	Creative iMedia in the industry	External	40%	1hr 15 mins
R094	Creating Digital Graphics	Internal	30%	30 hrs
R099	Developing digital games	Internal	30%	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.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.

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 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
Unit R093: The Media Industry (Exam Topics)	Pupils will learn about how to plan pre-production effectively including understanding of client requirements and reviewing pre-production briefs. • Understanding the purpose and content of pre-production • Being able to plan pre-production. • Being able to produce and review pre-production documents.	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 component parts and resources needed for a creative media product) Visualisation diagrams (e.g. for still images and graphics) Storyboards (e.g. for use with video, animation) Scripts (e.g. for a video production, voiceover, comic book or computer game) 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 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	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.

R097: Interactive Digital Media Product	In this unit pupils will plan a interactive digital media product for their coursework.	Produces a summary of the capabilities and limitations of a range of 2D and 3D software used for digital game creation which demonstrates thorough understanding. Demonstrates a thorough understanding of gaming platform hardware and peripherals required to create and test digital games. Produces an interpretation from the client brief for a digital game which fully meets the client requirements. Produces a clear and detailed identification of target audience requirements. Demonstrates a thorough understanding of the key aspects of game creation. Creates a clear and detailed test plan for the digital game which fully tests the functionality, listing tests, expected and actual outcomes and identifying re-tests. Applies detailed design techniques to the planning of the game structure, including extensive reference to pathways, game play and game mechanics and with thorough consideration of the success criteria.	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.

How you will be assessed:

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. The exam is external 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

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Progression routes and career opportunities:

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Sixth form.

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Amy Meech	**Teacher**	ameech@haileyhall.herts.sch.uk	**01992 465208**