Holy Cross Curriculum Progression

COMPUTING

EYFS | Early Learning Foundation

Early Learning Goal links: Understanding the World – Technology in everyday life; Expressive Arts and Design – Creating with Materials; Communication and Language – following and giving instructions; Personal, Social and Emotional Development – managing behaviour and keeping safe.

COMPUTER SCIENCE | Early algorithms and control

Instructions and algorithms	Exploring and correcting	Technology and control
Follow, give and put simple instructions in order during play and everyday routines.	Explore how changing one instruction changes what happens; correct mistakes with support.	Notice how simple devices and programmable toys respond to buttons and instructions.

INFORMATION TECHNOLOGY | Creating and handling information

Recognising technology	Creating digital content	Organising information
Recognise familiar technology at home and in school and describe what it helps people do.	Use age-appropriate devices to draw, photograph, record or create; begin to save or revisit work.	Explore simple ways of sorting, grouping and talking about information.

DIGITAL LITERACY | Safe and responsible use

Using devices safely	Seeking help	Personal information
Use devices with care and follow agreed rules for safe use.	Know to ask a trusted adult for help if something on a screen is worrying or unfamiliar.	Begin to understand that some information about ourselves is private.

PROJECT EVOLVE | Online safety progression (2026–27)

Holy Cross Curriculum Progression

Computing

AUTUMN	SPRING	SUMMER
Online bullying: Describe ways people can be unkind online. **Privacy and security:** Identify personal information, including name, address, age, birthday and location.	**Online reputation:** Recognise that information about us can be put online. **Online relationships:** Recognise that people can communicate using the internet.	**Managing online information:** Talk about using the internet to find information. **Health, wellbeing and lifestyle:** Identify rules for safe and healthy technology use at home and elsewhere.

Progression into Year 1: Children move from exploring technology and following instructions to creating, testing and explaining simple digital outcomes.

Holy Cross Curriculum Progression

Computing

YEAR 1

COMPUTER SCIENCE | Algorithms and programming

Designing algorithms	Programming and coding	Reasoning, testing and debugging
Explain that an algorithm is a sequence of instructions; arrange steps to complete a simple task.	Create a short program using ordered commands; identify and correct an instruction that causes an error.	Follow code one step at a time and predict where an object or character will finish.

INFORMATION TECHNOLOGY | Networks, information and creation

Technology and networks	Searching and evaluating	Digital content and data
Identify digital and non-digital technology and describe familiar uses in school and at home.	Create, sort and edit simple text, pictures or data; name, save and reopen digital work.	Access a suitable online resource by following guided instructions.

DIGITAL LITERACY | Online safety and responsible use

Privacy and security	Respectful digital behaviour	Help, reporting and wellbeing
Keep passwords and other personal details private.	Use technology respectfully and store personal work in an appropriate place.	Tell a trusted adult about upsetting content or contact.

PROJECT EVOLVE | Online safety progression (2026–27)

AUTUMN	SPRING	SUMMER
Online bullying: Choose online behaviour that does not upset other people. **Privacy and security:** Explain why an adult should be asked before personal details are shared.	**Online reputation:** Recognise that online information may remain available and be copied. **Online relationships:** Give examples of when to ask permission before doing something online.	**Managing online information:** Ask a trusted adult for help after encountering upsetting or worrying online content. **Copyright and ownership:** Recognise that saving someone else's work does not make it your own.

Skills progress through increasing independence, complexity, accuracy and evaluation.

Holy Cross Curriculum Progression

Computing

YEAR 2

COMPUTER SCIENCE | Algorithms and programming

Designing algorithms	Programming and coding	Reasoning, testing and debugging
Write precise instructions for a task and explain why their order matters.	Build a simple program for a purpose; find and fix mistakes in its sequence.	Identify events and actions in a program and explain what happens when a command is triggered.

INFORMATION TECHNOLOGY | Networks, information and creation

Technology and networks	Searching and evaluating	Digital content and data
Organise and retrieve information using a simple database or digital search.	Create and edit digital content combining text, images, sounds or other media; save and retrieve confidently.	Use guided searches to find relevant information and recognise digital technology in everyday life.

DIGITAL LITERACY | Online safety and responsible use

Privacy and security	Respectful digital behaviour	Help, reporting and wellbeing
Describe why some online searches and shared material may be unsuitable.	Share work appropriately and recognise that digital messages can be seen by others.	Use simple safety rules for electronic communication and report concerns to a trusted adult.

PROJECT EVOLVE | Online safety progression (2026–27)

AUTUMN	SPRING	SUMMER
Online bullying: Explain what bullying is, how it might happen and how it can affect someone; give examples of respectful online behaviour. **Privacy and security:** Describe rules for protecting personal information, including keeping passwords private.	**Online bullying (revisited):** Give examples of ways to behave online without upsetting others. **Online relationships:** Explain why permission matters before sharing information about another person.	**Managing online information:** Explain why information found online may be inaccurate or untrue. **Copyright and ownership:** Recognise that content published online may belong to someone else.

Skills progress through increasing independence, complexity, accuracy and evaluation.

Holy Cross Curriculum Progression

Computing

YEAR 3

COMPUTER SCIENCE | Algorithms and programming

Designing algorithms	Programming and coding	Reasoning, testing and debugging
Break a familiar task into smaller steps and turn these into a simple program.	Create programs using sequences and basic repetition; explore the difference between repeating instructions and timed actions.	Trace several instructions, predict the result and locate and correct mistakes.

INFORMATION TECHNOLOGY | Networks, information and creation

Technology and networks	Searching and evaluating	Digital content and data
Describe how the internet supports communication, including email and sending attachments.	Carry out a basic online search and retrieve information related to a question.	Collect, organise and present information using charts or branching databases; choose suitable tools.

DIGITAL LITERACY | Online safety and responsible use

Privacy and security	Respectful digital behaviour	Help, reporting and wellbeing
Create and protect a secure password and explain why it must stay private.	Communicate politely and appropriately using online tools.	Recognise unsafe contact or content and explain more than one way to get help.

PROJECT EVOLVE | Online safety progression (2026–27)

AUTUMN	SPRING	SUMMER
Online bullying: Describe appropriate and respectful ways to interact with others online. **Privacy and security:** Explain why people should choose carefully whom they trust with personal information.	**Online reputation:** Explain how to look for information about another person online. **Online relationships:** Explain why someone might reconsider sharing something if they feel uncomfortable or worried.	**Managing online information:** Distinguish a fact, opinion and belief, identifying examples in online posts, videos or news. **Copyright and ownership:** Explain why copying online work without permission is unfair.

Skills progress through increasing independence, complexity, accuracy and evaluation.

Holy Cross Curriculum Progression

Computing

YEAR 4

COMPUTER SCIENCE | Algorithms and programming

Designing algorithms	Programming and coding	Reasoning, testing and debugging
Plan and code solutions using logical steps, selection and repetition.	Use IF statements, variables, inputs and outputs to control what a program does.	Trace a program, predict its behaviour and debug errors using a systematic approach.

INFORMATION TECHNOLOGY | Networks, information and creation

Technology and networks	Searching and evaluating	Digital content and data
Identify basic network hardware and explain how devices connect and communicate.	Use search-engine features and make initial judgements about whether a webpage is trustworthy.	Select software, link content and improve digital work in response to feedback.

DIGITAL LITERACY | Online safety and responsible use

Privacy and security	Respectful digital behaviour	Help, reporting and wellbeing
Explain key online safety concepts and help others understand them.	Make responsible choices when communicating and sharing work digitally.	Identify several routes for reporting inappropriate content, contact or behaviour.

PROJECT EVOLVE | Online safety progression (2026–27)

AUTUMN	SPRING	SUMMER
Online bullying: Explain how content posted online can affect other people. **Privacy and security:** Explain the digital age of consent and why some online services seek consent.	**Online reputation:** Explain how information about a person may be created, copied or shared by others. **Online relationships:** Identify respectful interactions and distinguish healthy from unhealthy online behaviour.	**Managing online information:** Assess information for likely accuracy and make independent, respectful judgements. **Copyright and ownership:** Identify images, videos and music that require the owner's permission to reuse.

Skills progress through increasing independence, complexity, accuracy and evaluation.

Holy Cross Curriculum Progression

Computing

YEAR 5

COMPUTER SCIENCE | Algorithms and programming

Designing algorithms	Programming and coding	Reasoning, testing and debugging
Divide more complex tasks into manageable components and plan algorithms to meet a goal.	Combine sequence, selection and repetition with other coding structures to produce working programs.	Organise and test code as it develops; use logical checks to narrow down and correct errors.

INFORMATION TECHNOLOGY | Networks, information and creation

Technology and networks	Searching and evaluating	Digital content and data
Explain benefits and risks of networks and select appropriate methods of online communication for different audiences.	Use more focused searches and evaluate the reliability and credibility of information.	Work collaboratively to create digital products; review effectiveness and refine the outcome using feedback.

DIGITAL LITERACY | Online safety and responsible use

Privacy and security	Respectful digital behaviour	Help, reporting and wellbeing
Apply online safety rules independently across different devices and services.	Choose what information to share, protecting privacy and considering others' wellbeing.	Communicate respectfully, challenge unsuitable behaviour and know how to report it.

PROJECT EVOLVE | Online safety progression (2026–27)

AUTUMN	SPRING	SUMMER
Online bullying: Explain why joking or banter may be experienced as bullying by someone else. **Privacy and security:** Explain how free apps and services may collect, access or share private information.	**Online reputation:** Explain how others might form inaccurate judgements from someone's online information. **Online relationships:** Recognise that some online contacts may intend harm and identify appropriate sources of help.	**Managing online information:** Explain how stereotypes can be reinforced online and influence attitudes to others. **Copyright and ownership:** Find content that is permitted to be reused and explain how permission can be checked.

Skills progress through increasing independence, complexity, accuracy and evaluation.

Holy Cross Curriculum Progression

Computing

YEAR 6

COMPUTER SCIENCE | Algorithms and programming

Designing algorithms	Programming and coding	Reasoning, testing and debugging
Use abstraction and decomposition to design an algorithm for a complex programming challenge.	Combine and nest sequence, selection and repetition; use variables, functions, user inputs and outputs appropriately.	Explain how different parts of a program interact; systematically test, trace and correct specific bugs.

INFORMATION TECHNOLOGY | Networks, information and creation

Technology and networks	Searching and evaluating	Digital content and data
Distinguish the internet from the World Wide Web and explain local and wide-area networks.	Filter searches, compare sources and justify decisions about accuracy, quality and credibility.	Create digital content for an identified audience; evaluate against criteria and make purposeful improvements.

DIGITAL LITERACY | Online safety and responsible use

Privacy and security	Respectful digital behaviour	Help, reporting and wellbeing
Use a wide range of online services safely, independently and respectfully.	Recognise less obvious risks and inappropriate online behaviour, using critical judgement.	Protect personal and others' privacy and select suitable ways to seek advice or report concerns.

PROJECT EVOLVE | Online safety progression (2026–27)

AUTUMN	SPRING	SUMMER
Online bullying: Describe how to preserve evidence of online bullying and share it with a person who can help. **Privacy and security:** Explain why software and apps should be updated, including the purpose of automatic updates.	**Online reputation:** Explain ways to develop and maintain a positive online reputation. **Online relationships:** Explain the possible impact of taking or sharing inappropriate or embarrassing images, and where to seek help.	**Managing online information:** Challenge opinions presented as facts and explain why popularity does not establish truth or fairness. **Copyright and ownership:** Reference and acknowledge digital sources used in original work.

Skills progress through increasing independence, complexity, accuracy and evaluation.