OUR LADY IMMACULATE CATHOLIC PRIMARY SCHOOL

At Our Lady Immaculate Catholic Primary School, we strive to thrive, by being ready, respectful and kind every day. We do our very best in all that we do, for the glory of Christ, knowing that:

"With God all things are possible"

Computing Policy

Date	Review Date	Coordinator
utumn 2026	Autumn 2029	Yve Chuck

Headteacher:	Sophie Gibbs
Chair of Governing Body:	Catherine Squires

Vision

At Our Lady Immaculate, we strive to thrive in computing by being ready to learn, respect the safety of ourselves and our peers and show kindness when working together. The use of information and communication technology is an integral part of the National Curriculum and is a key skill for everyday life. Computers, tablets, programmable robots, digital and video cameras are a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information. At Our Lady Immaculate, we recognise that pupils are entitled to quality hardware and software and a structured and progressive approach to the learning of the skills needed to enable them to use it effectively. The aim of this document is to provide an overview to the Computing Curriculum across the Key Stages. It should also serve as a glossary of terms (Appendix 1) allowing a clear understanding.

We believe that Computing is a necessary subject which prepares children to live in a world where technology is moving at a rapid pace. So much so that children are being prepared to work with technology that doesn't even exist yet. For this reason, it is important that children are able to participate in the creation of these new technologies – placing greater emphasis on children as coders. Computing, in the National Curriculum, is split into three strands (Computer Science, Digital Literacy and Information Technology). It is important that children recognise the difference between what makes each one relevant to their future, as well as their everyday lives. This will require high quality teaching of Computing, from reception to year six, that utilises a combination of practical lessons (within the computer suite) and theory lessons (within the children's classrooms). Theory lessons, which are designed to promote discussion and nurture understanding, are highly relevant to other areas of the primary curriculum such as RSE.

Thus, the Computer Science strand should prepare children to understand what Computer Science is, as well as, complex computing concepts such as Algorithms and Binary code. At Key Stage Two, this knowledge should be taught at a deeper level encouraging child to learn about decomposition, debugging, variables and controlling physical systems. The Digital Literacy strand should prepare children to use the internet safely by giving them the knowledge to deal with inappropriate computing behaviours. This is echoed in the teaching and learning of appropriate computing behaviours. What is more, children will be taught how to take care of personal information, the differences between viruses and malware, and how to identify trustable sources. The Information Technology strand should prepare children to work with computers and other devices (such as tablets, mobiles). This should enable them to understand how technology is developing and how it has progressed. This will require children to be taught about the main part of a computer, how data is stored and how to complete the most basic of computer functions (such as saving work, presenting information and creating art).

Teaching Aims

Our Lady Immaculate Primary School aims to ensure all pupils are:

- provided with a relevant, challenging and enjoyable curriculum for computing.

- meeting the requirements of the National Curriculum programmes of study for computing.
- using computing as a tool to enhance learning throughout the curriculum.
- responding to new developments in technology.
- equipped with the confidence and capability to use computing throughout their later life.
- learning computing in other areas of the curriculum.
- developing their understanding of how to use computing safely and responsibly (with the addition of remote learning).

The national curriculum for computing aims to ensure that all pupils:

- Can understand and apply the fundamental principles of computer science, including logic, algorithms, data representation, and communication
- Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- Are responsible, competent, confident and creative users of information and communication technology.

What We Teach

Foundation Stage

It is important in the Foundation Stage to give children a broad, play-based experience of Computing in a range of contexts, including outdoor play. Computing is not just about computers. Computer Science is taught in its simplest form by playing operational games like ‘Simon says’, ‘Everybody do this’, ‘Follow the leader’ etc. This ensures that children understand the need to follow instructions and listen to commands. Children gain confidence, control and language skills through opportunities to explore using noncomputer-based resources such as shopping tills, toy mobile phones and walkie-talkie sets. Recording devices can support children to develop their communication skills. This is particularly useful with children who have English as an additional language. In addition, children will also be encouraged to use iPad apps e.g. Beebot, Daisy the Dinosaur, where the children can progressively apply computing skills.

By the end of key stage 1, pupils should be taught to:

- Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions
- Create and debug simple programs

- Use logical reasoning to predict the behaviour of simple programs
- Use technology to create, organise, store, manipulate and retrieve digital content
- Recognise common uses of information technology beyond the school
- Use technology safely and respectfully online, keeping personal information private, identify where to go for help and support when they have concerns about content or contact the Internet or other online technologies

By the end of key stage 2, pupils should be taught to:

- Design and write programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output; generate appropriate inputs and predicted outputs to test programs
- Use logical reasoning to explain how a simple algorithm works and to detect and correct errors in algorithms and programs
- Understand computer networks including the internet; how they can provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration
- Use search technologies effectively, appreciate how results are selected and ranked and be discerning in evaluating digital content;
- Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	E-safety: Using the internet safely	Digital Literacy & E-safety: using a computer/device	Coding with Codeapillars/Beebots	Digital Literacy: bug hunters	Digital Literacy: potty painters	Coding: Scratch Jnr - introduction and fundamentals
Year 2	E-safety: Staying safe on the internet	Digital Literacy & E-safety: using a computer/device	Coding: Scratch Jnr - introduction and fundamentals	Digital Literacy - using a computer	Digital Literacy: taking and using photos	Coding: Scratch Jnr - introduction and fundamentals
Year 3	E-safety: Google Share with care	Digital Literacy & E-safety: using a computer/device	Digital Literacy:Explore a Topic with Research and Collaboration	Coding: Animations - Space	Coding: Sound and music - Rock band	Coding: project
Year 4	E-safety: Google Don't fall for fake	Digital Literacy: Research and develop a topic	Coding: Interactive - Chatbot	Coding: Game - Boat race	Digital Literacy: Childnet video competition	Coding: project
Year 5	E-safety: Google Secure your secrets	Digital Literacy: Plan an event	Coding: Scratch - Space Junk Game	Coding: Catch the Dots Game	Digital Literacy: Childnet video competition	Coding: project
Year 6	E-safety: Google It's cool to be kind	Digital Literacy: Explore a Topic with Research and Collaboration	Coding: scratch maths Building with Numbers	Coding: Scratch Memory game	Digital Literacy: Childnet video competition	Coding: project

Resources and access

Our Lady Immaculate School acknowledges the need to continually maintain, update and develop its resources and to make progress towards consistent, compatible computer systems by investing in resources that will effectively deliver the objectives of the National Curriculum and support the use of IT, computer science and digital literacy across the school. Teachers are required to inform the computing subject leader or technician of any faults as soon as they are noticed. Resources if not classroom based are in shared areas or locked in secure cabinets. A part time Technician is currently in place to help support the subject leader to fulfil this role both in relation to hardware & software. Computing network infrastructure and equipment has been sited so that:

- Every classroom from EYFS to Y6 has a laptop connected to the school network and an interactive HD smart board.
- There are 33 pupil laptops
- There are 16 Google Chrome books for use by Year 5 and Year 6.
- Each class has an Ipad
- Internet access is available in all classrooms and shared learning areas.
- The computers, laptops and iPads are available for use throughout the school day as part of computing lessons and for cross-curricular use.
- Pupils may use IT and computing independently, in pairs, alongside a TA or in a group with a teacher.
- The school has a computing support technician who is in school every other Thursday morning and provides remote support.

Planning

At Our Lady Immaculate School, we use 'Teach Computing' to support teachers in planning for the curriculum. The units of work for Key Stage 1 and Key Stage 2 are based on a spiral curriculum. This means that each of the themes is revisited regularly (at least once

in each year group) and pupils revisit each theme through a new unit that consolidates and builds on prior learning within that theme.

This style of curriculum design reduces the amount of knowledge lost through forgetting, as topics are revisited yearly.

Where appropriate, activities are scaffolded so that all pupils can succeed and thrive. Scaffolded activities provide pupils with extra resources, such as visual prompts, to reach the same learning goals as the rest of the class. Exploratory tasks foster a deeper understanding of a concept, encouraging pupils to apply their learning in different contexts and make connections with other learning experiences.

Pupil progress towards objectives will be recorded by teachers as part of their class recording system.

Monitoring and Reviewing

The monitoring of the standards of the children's work and of the quality of teaching in computing is the responsibility of the computing subject leader. The computing subject leader is also responsible for supporting colleagues in the teaching of computing, for keeping them informed about current developments in the subject, and for providing a strategic lead and direction for the subject in the school. The computing subject leader gives the head teacher an annual summary report in which s/he evaluates the strengths and weaknesses in the subject and indicates areas for further improvement. The computing subject leader has specially-allocated time for carrying out the vital task of reviewing samples of the children's work and for visiting classes to observe the teaching of computing.

Inclusive teaching of ICT

At Our Lady Immaculate School, we teach computing to all children, whatever their ability, age, gender or race. Computing forms part of our school curriculum policy to provide a broad and balanced education for all children. We provide learning opportunities that are matched to the specific needs of children with learning difficulties. In some instances, the use of ICT has a considerable impact on the quality of work that children produce; it increases their confidence and motivation and allows access to parts of the curriculum to which the children would otherwise not have had.

When planning work in computing, we consider any targets which are evident on a class' provision map. Teachers identify children who are gifted and talented in the area of computing. It is the teacher's responsibility to ensure that these children are suitably challenged in their use of ICT and computing both in specific computing lessons and in using ICT in other curriculum areas. Opportunities are identified for these children to actively participate in more challenging aspects of computing.

Assessment and record keeping
Teachers regularly assess capability through observations and looking at completed work. Key objectives to be assessed are taken from the national curriculum to assess key computing skills each term. Assessing ICT and computing work is an integral part of teaching and learning and central to good practice. As assessment is part of the learning process, it is essential that pupils are closely involved.

Assessment can be broken down into:

- Formative assessments which are carried out during and following short focused tasks and activities. They provide pupils and teaching staff the opportunity to reflect on their learning in the context of the agreed success criteria. This feeds into planning for the next lesson or activity.
- Summative assessment should review pupils' capability and provide a best fit. Use of independent open-ended tasks, provide opportunities for pupils to demonstrate capability in relation to the term's work. There should be an opportunity for pupil review and identification of next steps. Summative assessment should be recorded for all pupils – showing whether the pupils are below, within or secure in the learning objectives.

Cross curricular links
As a staff we are all aware that IT and computing skills should be developed through core and foundation subjects. Where appropriate, IT and computing should be incorporated into schemes of work for all subjects. IT and computing should be used to support learning in other subjects as well as developing computing knowledge, skills and understanding. Our school provides pupils with opportunities to enrich and deepen learning using cross curricular approaches and uses computing Across the Curriculum, which embeds computing in English, Mathematics, Science, Geography and History.

Roles and Responsibilities

Computing Lead

The role of Computing Co-ordinator involves:

- Raising standards in computing as a National Curriculum subject.
- Aiding the implementation of the new computing curriculum by providing training and support to all staff, when necessary.
- Monitoring the delivery of the computing curriculum and reporting to the SLT and the Head teacher on the current status of the subject.
- Ensure the development of computing through the construction and analysis of annual action plans.

- Liaising with other services, such as professionals, for technical and curriculum support.
- Ensuring their own knowledge and understanding of computing is kept up-to-date by attending courses and sharing new knowledge with staff.
- Discussing financial decisions with the Head Teacher and Business Manager.
- Promoting the use of computing resources across school, working with the Head Teacher and Business Manager to ensure resources are current and up-to-date.

Staff will:

- Have regular access to training and the knowledge of the Computing Coordinator.
- Be responsible for managing computing within their classrooms and computing suite.
- Be responsible for planning and delivering the computing curriculum in line with the 'Teach Computing' scheme of work.
- Work with parents and carers to develop appropriate computing skills and behaviours.

Governors

All governors are interested in the development of computing to promote high quality teaching and learning in the school. A governor is nominated to be responsible for monitoring and evaluating the impact and value of computing on children's learning. They liaise with the subject leader and report back to the governing body with their findings annually.

Training

The computing subject leader will assess and address staff training needs as part of the annual development plan process or in response to individual needs and requests throughout the year.

Individual teachers should attempt to continually develop their own skills and knowledge, identify their own needs and notify the subject leader. All teachers have links to "Barefoot" and "Teach Computing" resources and training.

Security

- The computing technician will be responsible for regularly updating anti-virus software.
- Use of computing equipment will be in line with the trust's 'acceptable use policy'. All staff must sign a copy of the trust's policy annually.
- Children and parents sign a 'Responsible internet access and ICT use for pupils' form when they enter the school in EYFS. Parents will be made aware of the 'acceptable use policy' at school entry.
- All pupils and parents will be aware of the school rules for responsible use of ICT and computing and the internet and will understand the consequence of any misuse.

- The agreed rules for safe and responsible use of ICT and computing and the internet will be displayed in all ICT and computing areas.

Health and safety (see also health and safety policy)

The school is aware of the health and safety issues involved in children's use of ICT and computing. An electrical inspection is carried out in school every five years and portable electrical equipment in school is tested by the site manager every twelve months. It is advised that staff should not bring their own electrical equipment into school but if this is necessary, then the equipment must be PAT tested before being used in school. All staff should visually check electrical equipment before they use it and take any damaged equipment out of use. Damaged equipment should then be reported to the computing technician.

- children should not put plugs into sockets or switch the sockets on.
- trailing leads should be made safe behind the equipment
- liquids must not be taken near the computers
- e-safety guidelines will be set out in the e-safety policy & AUP

Parental involvement

Parents are encouraged to support the implementation of computing where possible by encouraging use of computing skills at home during home-learning tasks and through the school website. They will be made aware of e-safety and encouraged to promote this at home.

Date: Autumn 2026
To be reviewed: Autumn 2029