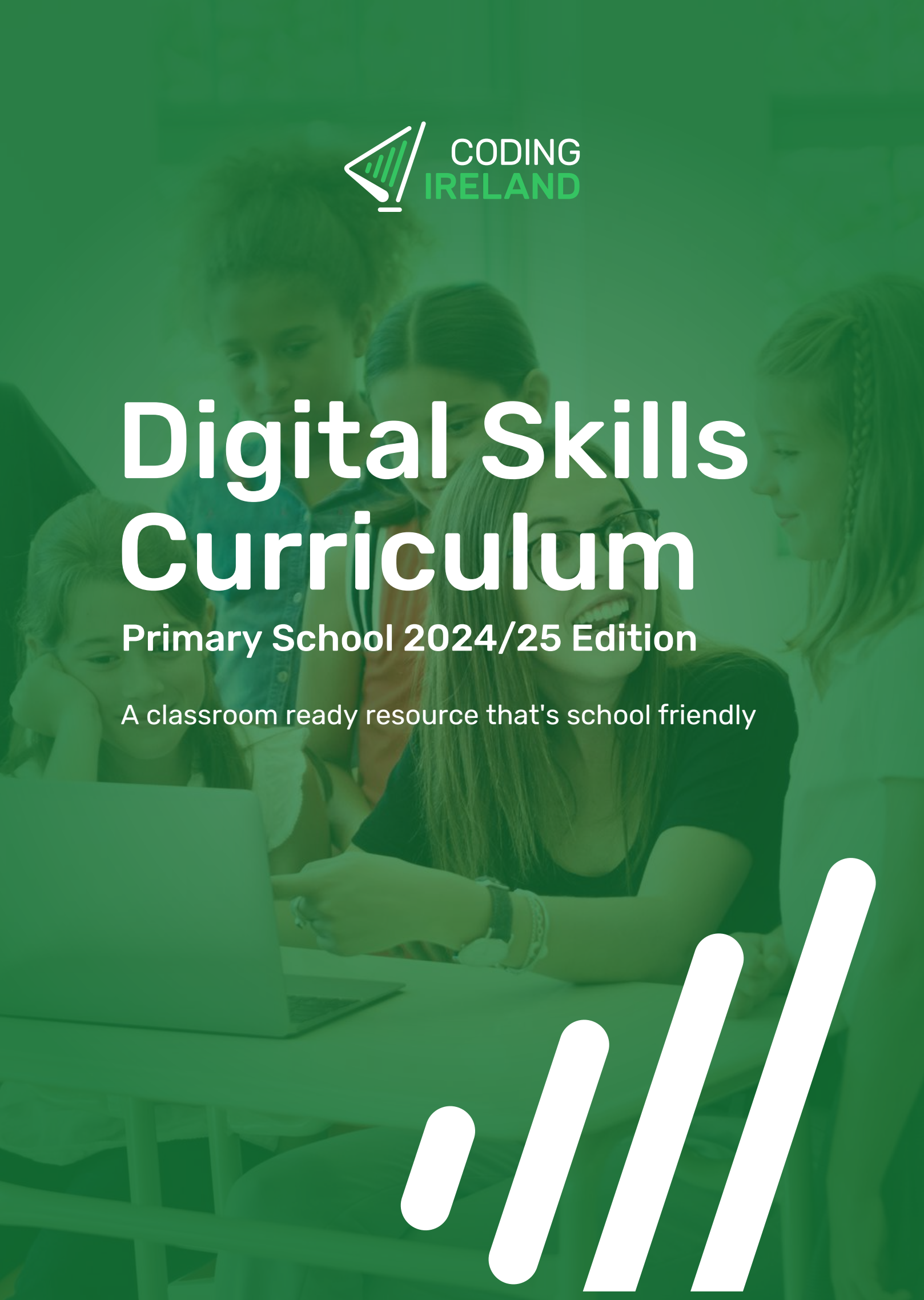


CODING IRELAND

Digital Skills Curriculum

Primary School 2024/25 Edition

A classroom ready resource that's school friendly

Discover the Digital Skills Curriculum

The Digital Skills Curriculum brings coding and digital skills to primary school classrooms in a way that is engaging and accessible. Through hands-on, interactive lessons, students are introduced to foundational coding concepts, encouraging creativity and problem-solving. Each module is carefully structured to guide students in an enjoyable journey through digital learning, supporting their growth and confidence in new skills.

Empowering Every Teacher, Inspiring Every Student

This curriculum is designed for easy delivery by any teacher, regardless of prior experience with coding. With clear, step-by-step guidance and adaptable lesson plans, it allows teachers to effortlessly lead their students through each project. The curriculum supports diverse learning styles and paces, fostering a classroom environment where every student can thrive and explore their potential.

Teacher-Friendly
Clear instructions and resources to guide teachers and students at every step.

Step-by-Step Lessons
Easy-to-follow lessons that build skills progressively.

Engaging & Flexible
Interactive lessons that suit different learning paces and abilities.

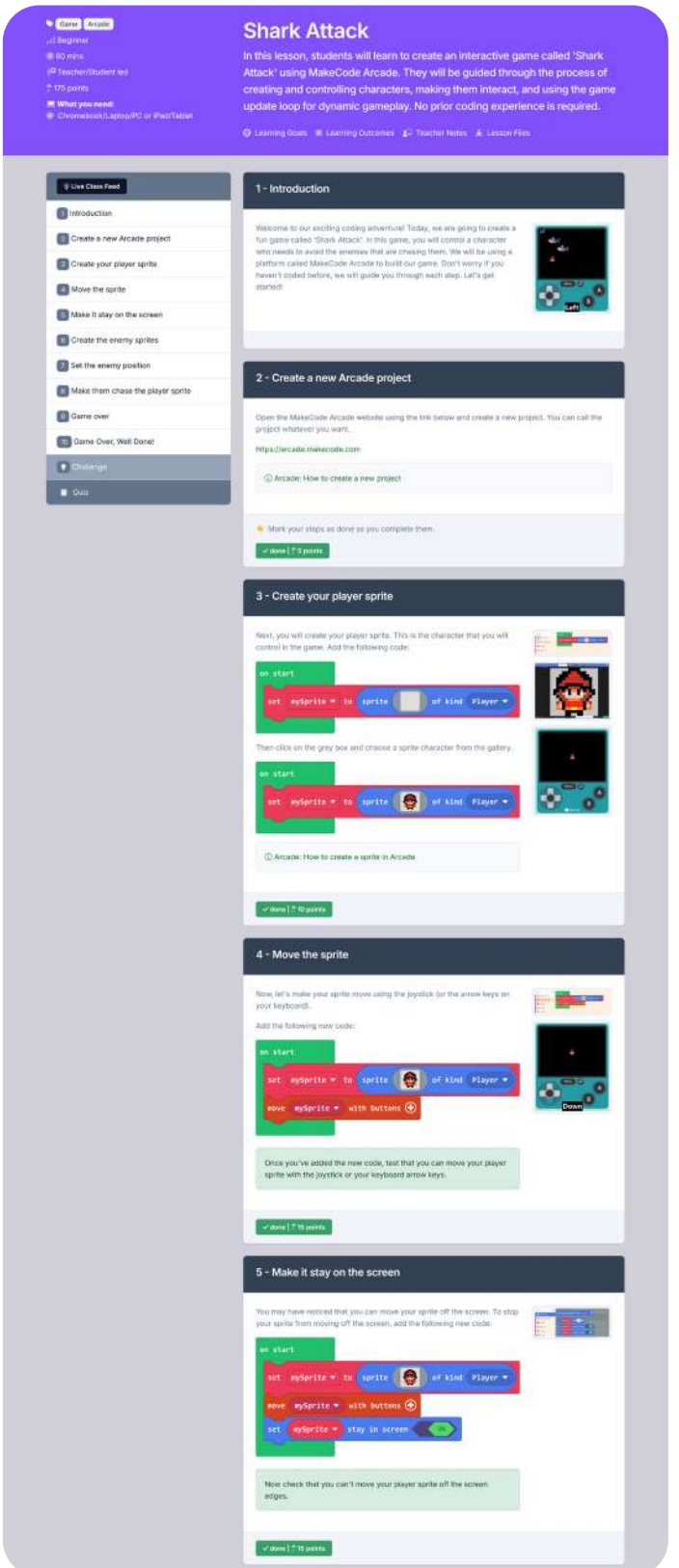
Cost-Effective Learning
Only €9 per student for a full year of engaging digital skills lessons

Engage Students, Empower Teachers

The Digital Skills Curriculum is designed with simplicity and adaptability in mind, ensuring any teacher—regardless of prior coding experience—can confidently guide their class through exciting and educational projects.

Each lesson features step-by-step instructions, interactive visuals, and built-in challenges to keep students engaged while fostering creativity and problem-solving skills. With just a laptop or tablet, students can explore coding concepts and create their own projects.

Discover how easy it is to integrate digital skills into your classroom. The screenshot below demonstrates a typical lesson interface, providing clear guidance for both teachers and students. Every module is structured to be fun, accessible, and impactful.



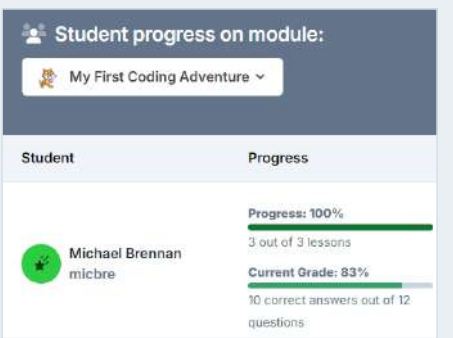
How It Works

1 Students log into their Coding Ireland account using a class login code, where they can access their next lesson.

2 Each lesson provides step-by-step guidance, allowing students to progressively build coding skills and confidence through engaging, project-based learning modules.

3 Upon completing a project, students can tackle optional challenges and a quick multiple-choice quiz to reinforce their learning and encourage exploration beyond the lesson.

4 With the 'Teacher Dashboard,' you can monitor and support your class in real-time, track student progress, identify areas needing extra help, and ensure everyone stays on track in their learning journey.



Junior/Senior Infants

In Junior and Senior Infants, students dive into coding with playful, hands-on activities. Through **teacher-led** lessons they'll explore sequencing, direction, and problem-solving.

This year is all about discovery and fun, giving students a first taste of coding in a simple and engaging way.

SCAN HERE
TO BROWSE THESE MODULES

Sarah Mather
St Conleth's NS

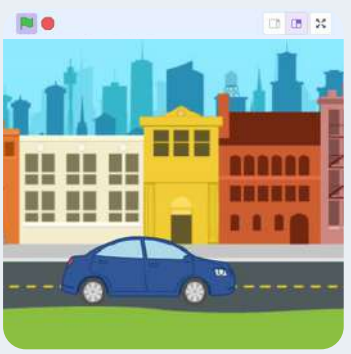
"The little ones love the hands-on approach, and I can see their confidence bloom with every lesson!

Module 1 Exploring Patterns	Module 2 1st Steps in Digital Storytelling	Module 3 Journey into Robotic Movements
No Equipment required	Students require a tablet	Students require access to Bee-Bots
First Things First	Characters On the Move	Bee-Bot Basics
If This, Then That	Dance Party	Twists and Turns
Order Up!	Double the Fun	Flower Power
Number Line Adventure	City Cruise ●	Bee-Bot Bloom Hunt
Grid Explorer	Ready, Set, Race	Square Dancing
Big Grid Challenge	Floating in Space	Number Tracer

City Cruise

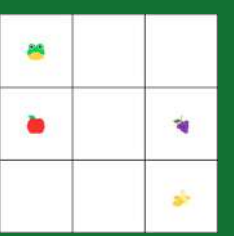
● LESSON SPOTLIGHT

In this lesson, you'll be moving characters and changing backgrounds. You'll also learn how to make a car drive across a city background, and if you're up for a challenge, how to resize the car.



Extra Challenge
Once you've animated the car driving across the city, try changing its size—can you make it bigger or smaller? Then, add more vehicles like a bus, bike, or even a flying object. Experiment with different speeds and directions.

Integrated Interactive Whiteboard Activities



1st Class

In 1st Class, students build on their coding foundation with more structured activities that deepen their understanding of sequencing, logic, and problem-solving.

Interactive challenges this year blend creativity with coding concepts through **teacher-guided** projects.

SCAN HERE
TO BROWSE THESE MODULES

Caoimhe Lynch
St Paul's Primary School

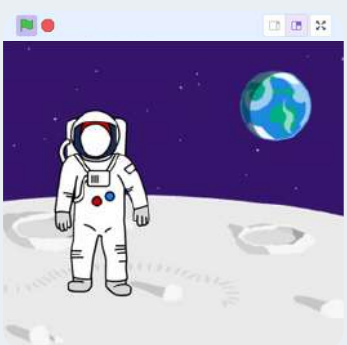
"The activities are perfect for young learners, they love the challenges and are building skills step by step!

Module 1 The World Of Logic	Module 2 Adventures in Digital Creation	Module 3 Electricity and Simple Circuits
No Equipment required	Students require a tablet	Students require access to Snap Circuit Kit
Pattern Play	Move and Groove	Electric Light and Switch
The Odd One Out	City Cruise	Electric Light and Press Switch
What Happens Next?	**Floating in Space** ●	Motor Fan and Switch
Grid Games	Dribble and Dunk	LED Circuit
Mastering the Maze	Ready, Set, Go!	LED and Phototransistor
Dance Commands	Talk it Out	Conduction
	Maze Master	

Floating in Space

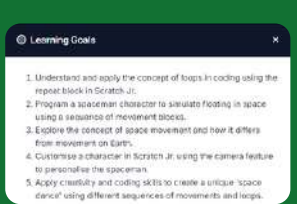
● LESSON SPOTLIGHT

In this lesson students learn how to use variables to keep score and how to create and control clones in Scratch. The game involves a character named Ripley chasing stars, with the score increasing each time a star is caught" to "Embark on a space adventure by programming a spaceman to float in the cosmos using Scratch Jr. Learn about repeating actions, remove the default sprite, add a spaceman character, and set a space-themed background.



Extra Challenge
Want an extra challenge? Add other space characters like aliens or spaceships to your project. Can you make them interact with your astronaut? Maybe the alien says "hello" or the spaceship zooms by as you explore.

Hands-On Snap Circuit lessons



2nd Class

In 2nd Class, students take a big step into coding, exploring animations and simple game design. They'll learn to control characters, create interactive stories, and bring ideas to life.

This year focuses on building coding logic through creative, hands-on projects, laying the foundation for future skills.

SCAN HERE
TO BROWSE THESE MODULES

Tiernan Murray
Tallow NS

"Watching students light up as they bring their ideas to life through coding is truly rewarding.

Intro Module	Module 1	Module 2	Module 3
Introduction to Coding	Exploring Coding	Creative Coding Challenges	Discovering Circuit Magic
Students just need an iPad/tablet or a Chromebook/laptop (it's OK to share)			Snap Circuits are required, can be supplied.
Introduction to Coding	Animal sounds	Animating Characters	Electric Light and Switch
Scratch Tutorial	Crabby Cursor Chaser	Making Movements Loop	Electric Light and Press Switch
Paddle Ball Game	Rainbow Paintbrush	Talking and Timing	Motor Fan
	Shark Tank ●	Animating Conversation	LED Circuit
	Balloon Pop Game	Backgrounds in Motion	LED and Phototransistors
	Story Adventures	Hide and Seek	Conduction
	Dino Food Game	Broadcasting Signals	
	Brainstorming Blast	The Big Finale	

Shark Tank

● LESSON SPOTLIGHT

In this lesson, students will learn how to create a game where a shark catches fish. They will learn how to control the shark using the keyboard, make fish disappear when caught, and use the 'touching' block to detect sprite collisions.

Extra Challenge
Your challenge is to add a new sea creature sprite from the library and position it somewhere on the stage. Then, write code to make it move around the screen. Finally, make it disappear when the shark catches it—just like the fish!

Built-in Learning Goals and Outcomes

3rd Class

In 3rd Class, students advance to structured projects, moving from animations to arcade-style games. They'll learn game mechanics like scoring and timers, adding complexity to their skills.

This year fosters critical thinking in game design, empowering students to create engaging digital experiences.

SCAN HERE
TO BROWSE THESE MODULES

Lisa Whiston
Central Model Senior School

"Our class has become so creative with game design! They're learning valuable skills without even realising it.

Intro Module	Module 1	Module 2	Module 3
Introduction to Coding	Coding and Creative Projects	Intro to Game Design	Microbit Basics

Students just need an iPad/tablet or a Chromebook/laptop (it's OK to share)			Microbits are required, can be supplied.
Introduction to Coding	Traffic Light Sequence	Intro to The Arcade	Meet the Microbit
Scratch Tutorial	Frog Frenzy	Avoid the Enemy	Emoji
Paddle Ball Game	Create a Character	Cherry Collection	Microbit Dice
	Banana Stamp	Beat the Clock	Temperature Tales
	Virtual Pet	Arcade Build Battles	Compass
	Fish Tank Clicker	Maze Madness	Animation
	GIFtastic	**Fruit Frenzy** ●	Music Maker
	Brainstorming Blast	Game Lab	Microbit Lab

Fruit Frenzy

● LESSON SPOTLIGHT

In this lesson students will create an interactive game called 'Fruit Collector' using MakeCode Arcade. You'll learn how to create and control a character, generate falling fruits and harmful rocks, and manage scoring and lives.

Extra Challenge
Your challenge is to add a new type of fruit to the game. This fruit should appear every 3 seconds and give the player 2 points when collected. Design your new fruit sprite and make sure it falls from the top of the screen just like the strawberries.

Student Certificates

4th Class

In 4th Class, students tackle larger interactive projects, solving creative challenges that build confidence in applying coding to real tasks.

This year emphasizes discovery and critical thinking, preparing them for more advanced work ahead.

SCAN HERE
TO BROWSE THESE MODULES

David McPhillips
Castle Park School

"The interactive projects have sparked critical thinking—students approach challenges with such excitement."

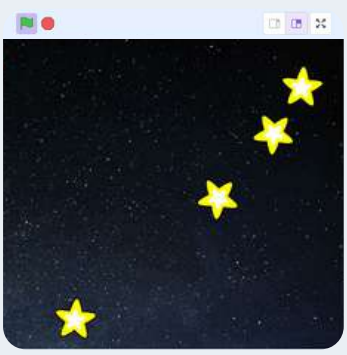
Intro Module	Module 1	Module 2	Module 3
Introduction to Coding	Dynamic Digital Projects	Expanding Game Design	Microbit Adventures

Students just need an iPad/tablet or a Chromebook/laptop (it's OK to share)			Microbits are required, can be supplied.
Introduction to Coding	Diver Game	Intro MakeCode Arcade	Meet the Microbit
Scratch Tutorial	**Star Chaser** ●	Shark Attack	Light Clapper
Paddle Ball Game	Maze Game	Monkey Mayhem	Step Counter
	Text to Speech	Target Test	Sound level
	Pattern Snake	Arcade Build Battles	Fruit and Veg Piano
	Easter Egg Catch	Prison Break	Compass &Thermometer
	Sound effects	Car Collector	Hot Potato
	Build Battles	Game Lab	Microbit Lab

Star Chaser

● LESSON SPOTLIGHT

In this lesson students learn how to use variables to keep score and how to create and control clones in Scratch. The game involves a character named Ripley chasing stars, with the score increasing each time a star is caught.



Extra Challenge
Your challenge is to create a countdown timer that starts at 30 seconds when the game begins. When the timer reaches zero, the game should stop, and Ripley should no longer be able to catch stars.

School Awards Available

5th Class

In 5th Class, students advance their coding with projects that blend creativity and real-world problem-solving.

They'll tackle tasks like building interactive displays, focusing on collaboration and practical coding to deepen their understanding of technology's role in everyday solutions.

SCAN HERE
TO BROWSE THESE MODULES

Sinead Murrihy
St Patricks NS

"Coding projects that relate to real-world problems make learning more meaningful and memorable for my class."

Intro Module	Module 1	Module 2	Module 3
Introduction to Coding	Coding and Interactive Creators	Game Design Studio	Microbit Masterclass

Students just need an iPad/tablet or a Chromebook/laptop (it's OK to share)

Microbits also required, can be supplied.

Introduction to Coding	Banana Jump	First Arcade Project	Exploring Microbits
Scratch Tutorial	Penalty Shootout ●	Space Dodge	Reaction Timer
Paddle Ball Game	Racing Car	Bat Battle	Microbit Magic 8 Ball
	Music Video	Prison Break	Microbit Alarm System
	Red V Blue V Green	Arcade Build Battles	Microbit Weather Station
	Space Shooter	Dino Jump	Microbit Finder
	Make a Clock	Monster Battle Arena	Microbit Pet
	Build Battles	Game Lab	Microbit Lab

Dino Jump

● LESSON SPOTLIGHT

In this lesson, students will learn to create an interactive game called Dino Jump using MakeCode Arcade. They will design a map, create a dinosaur character, program it to jump over obstacles, keep score, and determine game outcomes.

Extra Challenge
Let's make it even more exciting by adding a new type of obstacle! Your challenge is to add a flying bird that the dino must also avoid. The bird should move across the screen at a different height than the cactuses.

Coding Leaderboard for Students

6th Class

In 6th Class, students tackle advanced coding projects, simulating real-world systems and taking on complex challenges. Schools can also explore modules on autonomous cars and AI.

This final year encourages innovation, blending creativity with critical skills in their most advanced projects yet.

SCAN HERE
TO BROWSE THESE MODULES

Heather Martin
Willow Park School

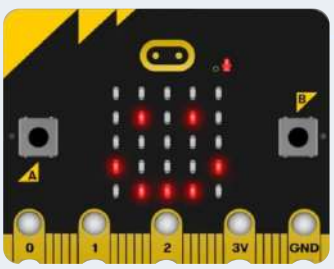
"These lessons encourage independence, and it's amazing to see students solve complex tasks on their own.

Intro Module	Module 1	Module 2	Module 3
Introduction to Coding	Digital Creation Lab	Advanced Game Development	Microbit Inovators
Students just need an iPad/tablet or a Chromebook/laptop (it's OK to share)			Microbits are required, can be supplied.
Introduction to Coding	Translate	First Arcade Project	**Exploring Microbits** ●
Scratch Tutorial	Shark Swim	Monkey Mayhem	Microbit Sensor Graphs
Paddle Ball Game	Autonomous Car	Space Shooter	Exactly 11
	Pattern Creator	Platform Place	Microbit Bop it Game
	Attack of the Dots	Arcade Build Battles	Microbit Voting System
	Rocket Lander	Galaxy Ghost	Microbit Paddle Ball
	Scratch Platformer	Donut Rush	Microbit Zombies
	Build Battles	Game Lab	Microbit Lab

Exploring Microbits

● LESSON SPOTLIGHT

This step-by-step lesson guides you through creating a new project, exploring the project editor, adding and deleting code, and programming your microbit to display messages, react to button presses, show icons, play melodies, and respond to movement.



Extra Challenge
Now, it's time to explore! Try out different blocks from the toolbox and see what they do. You can make your microbit display different messages, react to button presses, and even respond to movement.

Optional Extension Modules

Extra Modules
- Exploring Electronics and Light
- Designing and Building for the Future
- Discovering Artificial Intelligence

Get Started with the Digital Skills Curriculum!

For only €9 per student, you can bring coding and digital skills to your classroom. Scan the QR code to sign up and provide your students with a full year of engaging, hands-on learning.

With step-by-step lessons and teacher-friendly tools, our curriculum is designed to make teaching coding as easy as possible — no prior experience required.

CODING

ROBOTICS

DIGITAL ART & ANIMATION

ARTIFICAL INTELLIGENCE

CYBERSECURITY

> The Digital Skills Curriculum has had a significant impact on our students' learning, providing them with foundational skills in STEM, coding, and robotics. The lessons are easy to follow, with clear illustrations and instructions that support self-paced learning. The projects are well-pitched and allow for differentation, enabling students to take on additional tasks and deepen their understanding once they've mastered the basics.

Daniel Linehan
Principal, Ballycroneen NS

Teacher Training

Our teacher training course is designed for educators who want to take their coding teaching skills to the next level. With practical guidance and advanced tips, these courses help you deepen your knowledge and bring even more confidence to your classroom coding lessons.

Advance Your Coding Teaching Skills

Delve into coding education with this course, covering core concepts, effective teaching methods, and engaging classroom activities. Get hands-on with Scratch, Bee-Bots, Microbit, HTML basics, and JavaScript—equipping you to confidently teach coding in a fun, interactive way.

- ✓ Online
- ✓ DES Approved
- ✓ Self Placed
- ✓ Step-by-Step Guides
- ✓ Beginner Friendly
- ✓ Expert Advice

What Teachers Say

> I was thoroughly satisfied with this course. The instructor's expertise and real-world examples made complex concepts easy to understand, and the hands-on exercises gave me a solid foundation in Scratch. I highly recommend this course to anyone looking to gain a comprehensive understanding of coding.

Gillian Moloney
Hartstown NS

> I recently completed this interactive and engaging coding course, and it's been a transformative experience. The structure was well-organised and easy to follow, with hands-on projects that boosted my confidence in using Scratch, Micro Bits, and JavaScript. I feel prepared to tackle more complex coding challenges now.

Kathryn Russell
Central Model Senior School

SCAN HERE
TO ENROL

Coding School Awards

The Coding School Awards recognize and celebrate the dedication of Irish schools in integrating coding and STEM education into their curricula. These awards highlight the efforts of teachers and institutions in providing students with opportunities to engage with and program technology.

Award Categories and Criteria

Schools can apply for awards in the following categories:

Coding School

For schools teaching coding languages such as Scratch, HTML, CSS, JavaScript, Python, etc.

Robotics School

For schools programming robots, circuits, sensors, cars, or other robotic kits.

EACH CATEGORY OFFERS THREE LEVELS OF RECOGNITION:

SILVER	GOLD	Platinum
Requires at least 1 trained teacher and 5+ class hours per year.	Requires at least 3 trained teachers and 10+ class hours per year.	Requires at least 3 trained teachers and 30+ class hours per year.

Application Process

Teachers can submit an application on the Coding Ireland website, detailing the school's activities in the relevant categories.

Recognition for Qualifying Schools

Schools that meet the criteria receive:

- An award flag (5 ft x 3 ft) for the category and level.
- A certificate for the category and level.
- A digital badge for the category and level, suitable for display on the school's website and social media.

FOR MORE INFORMATION AND TO APPLY, VISIT WWW.CODINGIRELAND.IE/SCHOOLAWARDS

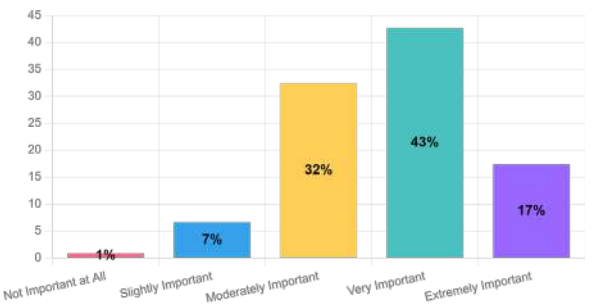
Coding Ireland STEM Report 2024

The Coding Ireland STEM Report 2024 provides a detailed analysis of the current state of STEM and Digital Skills education across Ireland. Covering primary and secondary schools, youth centres, and libraries, this report highlights the progress being made to foster STEM education while identifying challenges and opportunities for growth.

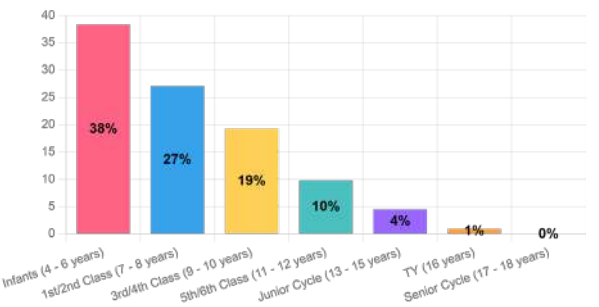
Conducted online between 13th March and 22nd May 2024, the report focuses on key areas like coding, robotics, and digital skills, which are recognised as essential components of technological literacy in a rapidly advancing digital age. It explores how these skills are being embedded into Ireland's educational landscape and their role in preparing students for a future shaped by technological transformation.

Key Findings

HOW IMPORTANT IS IT TO TEACH STEM & DIGITAL SKILLS?



WHEN SHOULD STUDENTS BE INTRODUCED TO STEM & DIGITAL SKILLS?



Ciaran from Coding Ireland says

This strong endorsement underscores the critical role STEM and digital skills play in modern education. It is clear that educators understand the necessity of equipping students with these competencies to prepare them for future challenges and opportunities in a rapidly evolving digital world. The near-universal agreement on this point is a positive sign for the ongoing development of robust STEM and digital skills programmes across various educational settings.

Alan from Coding Ireland says

This trend towards early education in STEM and digital skills highlights the importance educators place on equipping children with foundational knowledge from a young age. Early exposure not only builds familiarity but also fosters a long-term interest and competence in these critical areas. It's encouraging to see a proactive approach to integrating STEM and digital skills into the curriculum at such formative stages.

READ THE FULL REPORT AT WWW.CODINGIRELAND.IE/STEMREPORT2024

CODING IRELAND

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