



Kids&Coding

Detailed Course Curricula

Abuja's #1 Tech Academy for Kids — Building Young Minds, One Code at a Time.

1. Scratch Programming	<i>Ages 6–10</i>
2. WordPress & CMS	<i>Ages 11–14</i>
3. Front-End Development	<i>Ages 13–16</i>
4. General ICT	<i>All Ages</i>
5. mBlock & Robotics	<i>Ages 8–14</i>
6. Graphics Design (Canva)	<i>Ages 10–16</i>

Prepared by Kids&Coding Academy — 2026

Contact: onyeandaniel@gmail.com | 0805 907 2136 | Abuja, Nigeria

About This Curriculum Guide

This document provides a comprehensive breakdown of every course offered at **Kids&Coding Academy**. Each curriculum is designed by our expert instructors to be age-appropriate, project-based, and aligned with real-world digital skills. Our teaching methodology emphasizes:

- **Hands-On Learning:** Every concept is taught through building real projects.
- **Progressive Difficulty:** Topics build upon each other in a logical sequence.
- **Creativity First:** Students are encouraged to customize and personalize every project.
- **Peer Collaboration:** Group activities and code reviews build teamwork skills.
- **Portfolio Building:** Every student graduates with tangible work to showcase.

Class Formats Available:

- **Home Service:** One-on-one or small group sessions at your residence in Abuja.
- **Online Classes:** Live virtual instruction with screen sharing and interactive exercises.
- **Hybrid:** A blend of in-person and online sessions depending on course requirements.

Assessment & Certification:

Each course includes weekly mini-projects, a mid-course review, and a final capstone project. Upon successful completion, students receive an official **Kids&Coding Certificate of Completion** and a digital portfolio of their work.

Scratch Programming

Ages 6–10

■ 12 Weeks | 24 Sessions | 1.5 Hours per Session

A fun, block-based introduction to computational thinking where children build games, animations, and interactive stories using MIT Scratch. No typing required—just drag, drop, and dream!

MODULE 1: Introduction to Scratch & Computational Thinking (Weeks 1–2)

- What is Coding? (Unplugged Activities)
- Setting up a Scratch Account & Navigating the Interface
- The Stage, Sprite Library, and Backdrop Gallery
- Understanding the Block Palette (Motion, Looks, Sound)
- Sequencing: Making Sprites Move in Order
- The Concept of Events (Green Flag Clicked)
- Saving, Sharing, and Remixing Projects

MODULE 2: Sprite Control & Basic Animation (Weeks 3–4)

- Coordinate System on the Stage (X and Y Axes)
- Motion Blocks: Move, Turn, Go To, Glide
- Looks Blocks: Say, Think, Change Size, Change Color Effect
- Creating Simple Animations with Costume Changes
- Looping with 'Repeat' and 'Forever' Blocks
- Timing with 'Wait' Blocks
- Project: Dancing Sprite Animation

MODULE 3: Making Decisions with Conditionals (Weeks 5–6)

- Introduction to Boolean Logic (True/False)
- Sensing Blocks: Touching Color? Touching Sprite? Key Pressed?
- The 'If' Block: Making Sprites React
- The 'If-Else' Block: Two Possible Outcomes
- Using 'Ask and Wait' for User Input
- Operators: Simple Comparisons (>, <, =)
- Project: Interactive Quiz Game

MODULE 4: Loops, Variables & Game Mechanics (Weeks 7–8)

- Creating and Naming Variables (Score, Lives, Timer)
- Changing Variables (Add, Subtract, Set)
- Nested Loops: Loops Inside Loops
- Broadcasting Messages Between Sprites

- Cloning Sprites: Creating Enemies or Collectibles
- Random Number Generation for Unpredictability
- Project: Collect-the-Stars Game

MODULE 5: Building Complete Games (Weeks 9–10)

- Game Design Document: Planning Before Coding
- Maze Games: Wall Detection and Player Movement
- Platformer Basics: Gravity and Jumping Mechanics
- Shooting Games: Projectile Motion with Clones
- Adding Sound Effects and Background Music
- Creating Start Screens and Game Over Screens
- Project: Custom Arcade Game (Student Choice)

MODULE 6: Storytelling, Projects & Showcase (Weeks 11–12)

- Digital Storytelling: Scene Transitions and Dialogues
- Creating Interactive Stories with Multiple Endings
- Drawing Your Own Sprites and Backdrops (Vector Mode)
- Debugging: Finding and Fixing Bugs
- Commenting Code for Readability
- Portfolio Preparation: Polishing Final Projects
- Final Presentation: Student Game Showcase & Parent Demo

Learning Outcomes

- ✓ Understand core programming concepts: sequences, loops, conditionals, variables
 - ✓ Create 5+ original games and animations
 - ✓ Develop logical thinking and problem-solving skills
 - ✓ Present and explain their code to others
 - ✓ Receive a Certificate of Completion
-

WordPress & CMS

Ages 11–14

■ 10 Weeks | 20 Sessions | 2 Hours per Session

Students learn to build professional, marketable websites using WordPress without writing code. Covers design principles, content management, and the basics of running a real website.

MODULE 1: Understanding the Web & WordPress Basics (Weeks 1–2)

- How the Internet Works: Domains, Hosting, and Servers
- What is a CMS? WordPress vs. Other Platforms
- Setting Up a Local Development Environment (LocalWP)
- The WordPress Dashboard: Posts, Pages, Media, Comments
- Understanding the Difference Between WordPress.com and WordPress.org
- Creating Your First Post vs. Your First Page
- Basic Formatting: Headings, Paragraphs, Lists, Links

MODULE 2: Themes, Customization & Design Principles (Weeks 3–4)

- Choosing and Installing Themes from the Repository
- The WordPress Customizer: Colors, Fonts, and Logo
- Introduction to Design Principles: Contrast, Alignment, Proximity
- Creating and Managing Menus (Primary, Footer, Social)
- Using Widgets and Block Areas
- Understanding Responsive Design (Mobile, Tablet, Desktop)
- Project: Personal Blog with Custom Theme

MODULE 3: The Block Editor (Gutenberg) & Content Creation (Weeks 5–6)

- Introduction to Blocks: Paragraph, Image, Heading, Quote
- Advanced Blocks: Columns, Gallery, Cover, Media & Text
- Reusable Blocks and Block Patterns
- Creating Landing Pages with the Block Editor
- Embedding Videos, Maps, and Social Media Feeds
- SEO Basics: Writing for Search Engines
- Project: Multi-Page Business Website

MODULE 4: Plugins, Functionality & E-Commerce Basics (Weeks 7–8)

- What are Plugins? Installing and Activating Safely
- Essential Plugins: Security, Backup, Contact Forms
- Creating Contact Forms with WPForms
- Introduction to WooCommerce: Products, Cart, Checkout

- Setting Up Payment Methods (Simulation Mode)
- Managing Orders and Customer Accounts
- Project: Simple Online Store

MODULE 5: Website Management, Launch & Portfolio (Weeks 9–10)

- User Roles and Permissions (Admin, Editor, Author)
- Website Security: Strong Passwords, Updates, Backups
- Performance: Image Optimization and Caching Basics
- Moving from Local to Live Hosting (Conceptual)
- Google Analytics: Understanding Visitors (Overview)
- Creating a Portfolio Website to Showcase All Projects
- Final Presentation: Live Website Demo to Parents

Learning Outcomes

- ✓ Build 3+ complete websites (blog, business site, store)
 - ✓ Understand web design principles and user experience
 - ✓ Manage content using a professional CMS
 - ✓ Grasp basic e-commerce and online business concepts
 - ✓ Receive a Certificate of Completion
-

Front-End Development

Ages 13–16

■ 16 Weeks | 32 Sessions | 2 Hours per Session

A deep dive into real web development using HTML, CSS, and JavaScript. Students build responsive websites from scratch, learn modern frameworks, and create a professional portfolio to showcase their work.

MODULE 1: Web Fundamentals & HTML5 Structure (Weeks 1–3)

- How the Web Works: Clients, Servers, and HTTP
- Setting Up the Development Environment (VS Code, Live Server)
- HTML Document Structure: DOCTYPE, html, head, body
- Semantic HTML5: header, nav, main, article, section, footer
- Text Elements: Headings, Paragraphs, Lists, Links
- Multimedia: Images, Audio, Video, and iframes
- Forms and Input Types: text, email, password, textarea, button
- Tables and Data Representation
- HTML Validation and Accessibility Basics (alt text, labels)
- Project: Personal Profile Page

MODULE 2: CSS3 Styling & Visual Design (Weeks 4–6)

- Three Ways to Add CSS: Inline, Internal, External
- CSS Selectors: Element, Class, ID, Descendant, Pseudo-classes
- The Box Model: Content, Padding, Border, Margin
- Colors: Named, Hex, RGB, RGBA, HSL
- Typography: font-family, font-size, font-weight, line-height, Google Fonts
- Backgrounds: Colors, Images, Gradients, Positioning
- Display Properties: block, inline, inline-block, none
- Positioning: static, relative, absolute, fixed, sticky
- CSS Units: px, em, rem, %, vh, vw
- Project: Styled Restaurant Menu Page

MODULE 3: Layout Systems: Flexbox & CSS Grid (Weeks 7–9)

- Introduction to Flexbox: flex-container and flex-items
- Flex Direction, Wrap, Justify Content, Align Items
- Flex Grow, Shrink, and Basis
- Building Navigation Bars with Flexbox
- Introduction to CSS Grid: grid-template-columns and rows
- Grid Areas and Named Grid Lines
- Gap, Justify Items, and Align Content in Grid
- Building Card Layouts and Photo Galleries

- When to Use Flexbox vs. Grid
- Project: Responsive Photo Gallery Layout

MODULE 4: Responsive Design & Mobile-First Approach (Weeks 10–11)

- The Viewport Meta Tag and Its Importance
- Media Queries: Syntax, Breakpoints, and Best Practices
- Mobile-First vs. Desktop-First Design Philosophy
- Responsive Images: max-width, srcset, picture element
- Responsive Typography: clamp() and fluid sizing
- Hiding and Showing Elements on Different Screens
- Testing Responsiveness: Browser DevTools
- Common Responsive Patterns: Column Drop, Layout Shifter
- Introduction to CSS Frameworks (Bootstrap Overview)
- Project: Fully Responsive Landing Page

MODULE 5: JavaScript Fundamentals (Weeks 12–13)

- What is JavaScript? Adding Scripts to HTML
- Variables: var, let, const and Scope
- Data Types: Strings, Numbers, Booleans, Arrays, Objects
- Operators: Arithmetic, Comparison, Logical, Assignment
- Control Flow: if, else if, else, switch statements
- Loops: for, while, do-while, for...of, for...in
- Functions: Declaration, Expression, Arrow Functions
- DOM Manipulation: Selecting and Modifying Elements
- Event Listeners: click, submit, keydown, mouseover
- Project: Interactive To-Do List Application

MODULE 6: Advanced JavaScript & Interactivity (Weeks 14–15)

- String Methods: length, indexOf, slice, replace, toUpperCase
- Array Methods: push, pop, shift, unshift, splice, slice, map, filter
- Object Methods and JSON Basics
- setTimeout and setInterval for Timed Events
- Form Validation with JavaScript
- Creating Modals, Dropdowns, and Accordions
- Local Storage: Saving Data in the Browser
- Fetching Data: Introduction to APIs and fetch()
- Error Handling: try, catch, finally
- Project: Weather Dashboard App (using a public API)

MODULE 7: Portfolio Building & Deployment (Week 16)

- Planning a Professional Developer Portfolio
- Version Control with Git: init, add, commit, push (GitHub)

- Deploying Websites: GitHub Pages, Netlify, Vercel
- Custom Domain Concepts
- SEO for Developers: Meta Tags, Open Graph, Structured Data
- Performance Optimization: Minification, Image Compression
- Accessibility Audit: WCAG Guidelines Overview
- Code Review and Peer Feedback Sessions
- Final Project: Complete Personal Portfolio Website
- Graduation: Portfolio Presentation & Certificate Award

Learning Outcomes

- ✓ Write clean, semantic HTML5 and modern CSS3
 - ✓ Build fully responsive websites using Flexbox and Grid
 - ✓ Program interactive features with vanilla JavaScript
 - ✓ Understand APIs and asynchronous programming basics
 - ✓ Deploy live websites and manage code with Git
 - ✓ Create a professional portfolio with 5+ projects
 - ✓ Receive a Certificate of Completion
-

General ICT

All Ages

■ 8 Weeks | 16 Sessions | 1.5 Hours per Session

A foundational course covering essential computer literacy skills. Students master computer operations, file management, and the full Microsoft Office Suite (Word, Excel, PowerPoint) for academic and personal productivity.

MODULE 1: Computer Basics & Digital Literacy (Weeks 1–2)

- Parts of a Computer: Hardware vs. Software
- Input Devices: Keyboard, Mouse, Touchpad, Microphone
- Output Devices: Monitor, Printer, Speakers
- Turning On/Off Properly and Understanding Boot Process
- The Desktop: Icons, Taskbar, Start Menu, Search
- File Management: Creating Folders, Moving, Copying, Deleting Files
- Understanding File Types: .docx, .pdf, .jpg, .mp4
- Using USB Drives and Cloud Storage (Google Drive, OneDrive)
- Internet Basics: Browsers, Search Engines, URLs
- Online Safety: Passwords, Privacy, Recognizing Scams
- Typing Practice: Touch Typing Fundamentals (Home Row Keys)

MODULE 2: Microsoft Word Mastery (Weeks 3–4)

- Word Interface: Ribbon, Tabs, Quick Access Toolbar
- Creating, Saving, and Opening Documents
- Formatting Text: Font, Size, Color, Bold, Italic, Underline
- Paragraph Alignment: Left, Center, Right, Justify
- Line Spacing, Indentation, and Bulleted/Numbered Lists
- Page Setup: Margins, Orientation, Paper Size
- Inserting Images, Shapes, and SmartArt
- Tables: Creating, Formatting, and Merging Cells
- Headers, Footers, and Page Numbers
- Spell Check, Grammar Check, and Thesaurus
- Project: Create a Formatted School Essay or Letter

MODULE 3: Microsoft Excel Essentials (Weeks 5–6)

- Excel Interface: Workbook, Worksheets, Cells, Rows, Columns
- Entering Data: Text, Numbers, Dates, and Formulas
- Basic Formulas: SUM, AVERAGE, MAX, MIN, COUNT
- Cell References: Relative vs. Absolute (\$A\$1)
- Formatting Cells: Number Format, Currency, Percentage
- Sorting and Filtering Data

- Creating Simple Charts: Bar, Column, Pie, Line
- Conditional Formatting: Color Scales, Data Bars
- Printing Spreadsheets: Page Break Preview, Scaling
- Project: Personal Budget Tracker or Class Grade Sheet

MODULE 4: Microsoft PowerPoint & Presentation Skills (Weeks 7–8)

- PowerPoint Interface: Slides, Notes, Slide Sorter View
- Choosing and Customizing Slide Layouts and Themes
- Adding and Formatting Text Boxes and Placeholders
- Inserting and Editing Images, Charts, and Tables
- Transitions: Applying and Timing Slide Transitions
- Animations: Entrance, Emphasis, Exit Effects
- Slide Master: Creating Consistent Designs Across Slides
- Adding Audio, Video, and Hyperlinks
- Presenter View and Slide Show Settings
- Design Principles for Presentations: Less is More
- Project: Create and Present a 10-Slide Presentation
- Final Assessment: Practical Exam on All Office Applications

Learning Outcomes

- ✓ Confidently navigate any Windows or macOS computer
 - ✓ Type at improved speed and accuracy
 - ✓ Create professional documents in Microsoft Word
 - ✓ Organize and analyze data using Microsoft Excel
 - ✓ Design and deliver engaging presentations in PowerPoint
 - ✓ Understand fundamental online safety practices
 - ✓ Receive a Certificate of Completion
-

Students explore the exciting world of robotics and IoT through visual programming with mBlock. They learn to control hardware, program sensors, and build real-world automated projects using drag-and-drop blocks that translate to real code.

MODULE 1: Introduction to Robotics & mBlock (Weeks 1–2)

- What is Robotics? Real-World Examples (Mars Rover, Factory Bots)
- Introduction to mBlock: Installation and Interface Tour
- The mBlock Workspace: Stage, Sprites, and Block Palette
- Connecting mBlock to Hardware (mBot, Arduino, or Simulator)
- Understanding the Relationship Between Software and Hardware
- Basic Motion Control: Moving Forward, Backward, Turning
- Using the 'When Green Flag Clicked' Event for Robots
- Running Your First Program: LED Blink
- Troubleshooting: Common Connection Issues
- Project: Program a Robot to Move in a Square

MODULE 2: Sensors & Environmental Interaction (Weeks 3–4)

- Types of Sensors: Ultrasonic, Line Follower, Light, Sound
- Reading Sensor Data: Displaying Values on the Stage
- Ultrasonic Sensor: Measuring Distance and Avoiding Obstacles
- Line Follower Sensor: Detecting Black and White Lines
- Light Sensor: Reacting to Brightness Changes
- Sound Sensor: Clap-Activated Actions
- Using 'If' Statements with Sensor Input
- Calibrating Sensors for Accurate Readings
- Project: Obstacle-Avoidance Robot

MODULE 3: Loops, Variables & Advanced Movement (Weeks 5–6)

- Repeat Loops: Making Robots Perform Tasks Multiple Times
- Forever Loops: Continuous Monitoring and Reaction
- Creating Variables: Speed, Distance Traveled, Timer
- Using Variables to Control Motor Speed Dynamically
- Random Movement: Unpredictable Robot Behavior
- Precision Turning: Calculating Degrees and Distances
- Combining Multiple Sensors for Complex Behaviors
- Project: Line-Following Robot with Speed Control

MODULE 4: Actuators, Displays & Output Devices (Weeks 7–8)

- Understanding Actuators: Motors, Servos, and Buzzers
- RGB LED Control: Programming Colors and Patterns
- Buzzer and Tone Blocks: Creating Simple Melodies
- Servo Motor Control: Precise Angle Positioning
- 7-Segment Display: Showing Numbers and Letters
- LCD Display: Printing Custom Messages
- Combining Multiple Outputs: Light + Sound + Movement
- Project: Traffic Light Simulation with Sound Alerts

MODULE 5: IoT, Wireless Communication & Advanced Projects (Weeks 9–10)

- Introduction to IoT (Internet of Things): Connected Devices
- Bluetooth Communication: Controlling Robots from Phone/Tablet
- Wi-Fi Basics: Connecting Devices to Networks
- Reading Data from Online APIs (Weather, Time)
- Remote Control: Building a Custom Controller Interface
- Data Logging: Recording Sensor Data Over Time
- Introduction to Python Mode in mBlock (Conceptual)
- Project: Smart Home Model (Light + Fan + Sensor Control)

MODULE 6: Competition, Innovation & Showcase (Weeks 11–12)

- Robot Design Principles: Stability, Weight Distribution, Balance
- Building Custom Attachments: Grippers, Arms, Drawers
- Algorithm Design: Flowcharts for Robot Behavior
- Debugging Hardware: Wiring, Power, and Connection Issues
- Team Robotics: Collaboration and Role Assignment
- Mini Robotics Competition: Maze Solving or Sumo Wrestling
- Innovation Project: Design Your Own Robot for a Real Problem
- Final Showcase: Demonstration and Explanation to Parents
- Certificate Award and Next Steps in Robotics

Learning Outcomes

- ✓ Understand how software controls physical hardware
 - ✓ Program and calibrate multiple sensor types
 - ✓ Build autonomous and remote-controlled robots
 - ✓ Grasp IoT concepts and wireless communication basics
 - ✓ Design and present an original robotics project
 - ✓ Receive a Certificate of Completion
-

Graphics Design (Canva)

Ages 10–16

■ 10 Weeks | 20 Sessions | 1.5 Hours per Session

A creative journey into digital design using Canva. Students learn visual communication principles, brand identity, and how to create professional graphics for social media, marketing, and personal projects.

MODULE 1: Design Foundations & Canva Mastery (Weeks 1–2)

- Introduction to Graphic Design: What Makes Good Design?
- Canva Interface: Dashboard, Editor, Toolbar, Side Panel
- Creating an Account and Understanding Free vs. Pro Features
- Canvas Sizes: Social Media Posts, Presentations, Posters, Logos
- The Design Process: Brief → Research → Concept → Execution
- Elements Panel: Shapes, Lines, Frames, Graphics, Photos
- Uploading Custom Images, Logos, and Brand Colors
- Understanding Layers and Object Arrangement (Forward/Backward)
- Grid Systems and Alignment Tools
- Project: Create a Personalized Name Art Poster

MODULE 2: Color Theory, Typography & Visual Hierarchy (Weeks 3–4)

- Color Theory: Primary, Secondary, Tertiary Colors
- Color Harmonies: Complementary, Analogous, Triadic
- Using the Color Wheel and Color Palette Generators
- Psychology of Color: What Colors Communicate
- Typography Basics: Serif vs. Sans-Serif, Script, Display Fonts
- Font Pairing: Creating Harmonious Text Combinations
- Text Hierarchy: Headlines, Subheadings, Body Text
- Kerning, Leading, and Tracking Adjustments
- Visual Hierarchy: Guiding the Viewer's Eye
- Project: Design a Motivational Quote Poster with Perfect Typography

MODULE 3: Social Media Graphics & Content Creation (Weeks 5–6)

- Social Media Dimensions: Instagram (Post, Story, Reel Cover), Facebook, Twitter/X
- Creating Instagram Carousels and Story Templates
- Designing Engaging Facebook Cover Photos and Event Banners
- YouTube Thumbnails: Click-Worthy Design Strategies
- Using Canva Templates: Customizing Without Copying
- Adding Animations and Simple Motion to Static Designs
- Creating Content Calendars and Batch Designing
- Brand Consistency: Using Style Guides Across Platforms

- Project: Design a Complete Social Media Kit for a Fictional Brand

MODULE 4: Marketing Materials, Branding & Presentations (Weeks 7–8)

- Logo Design Principles: Simplicity, Memorability, Versatility
- Creating Logos in Canva: Text-Based, Icon-Based, Combination Marks
- Business Card Design: Information Hierarchy and Print Considerations
- Flyer and Poster Design: Attention-Grabbing Layouts
- Brochure and Menu Design: Multi-Page Documents
- Presentation Design: Slides That Tell a Story
- Infographics: Visualizing Data and Statistics
- Mockups: Presenting Designs on Real Objects (Phones, Billboards)
- Project: Create a Complete Brand Identity Package (Logo, Card, Flyer)

MODULE 5: Advanced Techniques, Portfolio & Career Path (Weeks 9–10)

- Photo Editing in Canva: Filters, Adjustments, Cropping, Background Remover
- Creating Custom Illustrations with Canva Draw
- Using Grids and Frames for Photo Collages
- QR Code Generation and Integration
- Charts and Graphs: Visualizing Information Beautifully
- Collaboration Features: Sharing, Commenting, and Team Editing
- Downloading in Different Formats: PNG, JPG, PDF, MP4
- Building a Design Portfolio in Canva (Using Canva Websites)
- Freelancing Basics: How Young Designers Can Start Earning
- Final Project: Personal Brand Portfolio + Client Pitch Presentation
- Graduation: Portfolio Review & Certificate Award

Learning Outcomes

- ✓ Understand core graphic design principles and visual communication
- ✓ Create professional graphics for all major social media platforms
- ✓ Design complete brand identity packages (logo, cards, flyers)
- ✓ Master Canva's advanced features including animations and mockups
- ✓ Build a digital portfolio showcasing 10+ design projects
- ✓ Receive a Certificate of Completion

Thank You for Choosing Kids&Coding

At **Kids&Coding Academy**, we believe every child has the potential to become a creator, not just a consumer, of technology. Our carefully structured curricula ensure that students not only learn technical skills but also develop critical thinking, creativity, and confidence that will serve them for a lifetime.

Ready to Enroll?

- WhatsApp: **0805 907 2136**
- Call: **0907 717 7537**
- Email: **onyeanudaniel@gmail.com**
- Location: **Abuja, Nigeria** (Home Service Available)

Building Young Minds, One Code at a Time.

© 2026 Kids&Coding Academy. All rights reserved.