

Course Outline

Module 1: Introduction to Computers and Coding

Topics

- What is a computer?
- What is programming?
- Importance of coding
- Introduction to Scratch
- Opening a Scratch account

Practical Activities

- Explore the Scratch homepage
 - Create first simple project
-

Module 2: Understanding the Scratch Interface

Topics

- Stage area
- Sprite pane
- Coding blocks
- Backdrops
- Toolbar and menus

Practical Activities

- Add sprites and backgrounds

- Move objects on the stage
-

Module 3: Motion and Movement

Topics

- Motion blocks
- Coordinates (x and y positions)
- Moving sprites
- Rotations and directions

Practical Activities

- Create moving characters
 - Design a simple maze movement
-

Module 4: Looks and Sound

Topics

- Changing costumes
- Speech and thought bubbles
- Adding sounds and music
- Visual effects

Practical Activities

- Create an animated character
- Add sound effects to projects

Module 5: Events and Control Blocks

Topics

- Event blocks
- Loops
- Wait commands
- Broadcast messages

Practical Activities

- Build an automatic animation
- Create synchronized actions

Module 6: Variables and Operators

Topics

- Creating variables
- Score systems
- Timers
- Basic math operators

Practical Activities

- Build a score counter
 - Create a timer game
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Module 7: Creating Interactive Stories

Topics

- Story planning
- Character interaction
- Scene transitions
- Dialogue creation

Practical Activities

- Design a digital storybook
 - Create a short animated story
-

Module 8: Game Development with Scratch

Topics

- Game design basics
- Collision detection
- Points and levels
- Winning and losing conditions

Practical Activities

- Create a racing game
 - Design a catching game
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Module 9: Debugging and Problem Solving

Topics

- Identifying coding errors
- Fixing bugs
- Testing projects
- Improving performance

Practical Activities

- Debug broken projects
 - Peer review activities
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Module 10: Final Project and Presentation

Topics

- Project planning
- Creativity and design
- Presentation skills
- Publishing projects online

Practical Activities

- Create a complete Scratch project
 - Present project to classmates
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Teaching Methods

- Interactive lessons

- Demonstrations
 - Practical coding exercises
 - Group activities
 - Project-based learning
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Assessment Methods

- Class participation
 - Coding assignments
 - Quizzes
 - Mini projects
 - Final Scratch project presentation
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Required Tools

- Computer or laptop
 - Internet connection
 - [Scratch Official Website](#)
 - Headphones (optional)
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Skills Learners Will Gain

- Creative thinking
- Logical reasoning

- Problem-solving skills
- Basic programming knowledge
- Digital literacy
- *Game and animation design*

Course Outline

Module 1: Introduction to Web Design

Topics

- What is web design?
- Types of websites
- Introduction to websites and browsers
- Front-end vs back-end development
- Career opportunities in web design

Practical Activities

- Explore different websites
 - Understand website structure
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Module 2: Introduction to HTML

Topics

- What is HTML?
- HTML document structure
- Headings and paragraphs
- Lists and tables
- Links and images

Practical Activities

- Create first webpage

- Add text, images, and links
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Module 3: Forms and Multimedia

Topics

- HTML forms
- Input fields and buttons
- Audio and video embedding
- Creating contact forms

Practical Activities

- Design a registration form
 - Embed videos into webpages
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Module 4: Introduction to CSS

Topics

- What is CSS?
- CSS syntax
- Colors and backgrounds
- Fonts and text styling
- Borders and spacing

Practical Activities

- Style a webpage

- Create colorful page designs
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Module 5: Layout and Positioning

Topics

- Divs and containers
- Flexbox basics
- Grid layout
- Website structure and alignment

Practical Activities

- Create a webpage layout
 - Build a simple homepage
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Module 6: Responsive Web Design

Topics

- Mobile-friendly websites
- Media queries
- Responsive images
- Screen size adaptation

Practical Activities

- Design a mobile-responsive page
- Test websites on different devices

Module 7: Introduction to JavaScript

Topics

- What is JavaScript?
- Variables and functions
- Buttons and interactions
- Alerts and simple animations

Practical Activities

- Create interactive buttons
 - Build a simple calculator
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Module 8: Website Design Principles

Topics

- Color theory
- Typography
- User experience (UX)
- Navigation design
- Website accessibility

Practical Activities

- Improve webpage appearance
- Create user-friendly navigation

Module 9: Web Design Tools and Platforms

Topics

- Introduction to design tools
- Website builders
- Using templates
- Introduction to version control

Practical Activities

- Explore design platforms
 - Customize a website template
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Module 10: Hosting and Publishing Websites

Topics

- Domain names
- Web hosting basics
- Uploading websites online
- Website maintenance

Practical Activities

- Publish a simple website
 - Connect a domain name
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Module 11: Final Web Design Project

Topics

- Planning a website project
- Creating a complete website
- Testing and debugging
- Presentation skills

Practical Activities

- Build a complete responsive website
 - Present project to the class
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Teaching Methods

- Interactive lectures
 - Practical coding sessions
 - Live demonstrations
 - Assignments and projects
 - Group discussions
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Assessment Methods

- Class exercises
- Quizzes
- Practical assignments

- Mini projects
 - Final website project
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Required Tools

- Computer or laptop
 - Internet connection
 - Code editor such as Visual Studio Code
 - Modern web browser
 - [MDN Web Docs](#)
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Skills Learners Will Gain

- Website design skills
 - HTML and CSS coding
 - Basic JavaScript programming
 - Responsive design techniques
 - Creative design thinking
 - Problem-solving skills
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Career Opportunities

After completing the course, learners can work as:

- Junior web designer

- Front-end developer
- Freelance website designer
- Website content manager
- Digital entrepreneur