

From logic to innovation: Teaching students to code, create, and solve ICT problems

This four-year elective course introduces students to the fundamentals of programming and computational thinking. Through hands-on activities and software development projects, students learn to design, write, and debug code using modern programming languages and environments.

The course cultivates logical reasoning, problem-solving, creativity, and collaboration—key skills in today's digital economy.

What Students Will Learn

The curriculum builds progressively in both theory and practice:

- Form I: Introduction to computers, logic, flowcharts, and basic programming with Scratch.
- Form II: Programming with Python, data types, control structures, and functions.
- Form III: Advanced programming (e.g., JavaScript), web development, GUI creation, and collaborative projects.
- Form IV: Capstone project development,

documentation, version control (e.g., Git), and software presentation.

Students use platforms and tools such as Scratch, Python, Replit, GitHub, and basic HTML/CSS editors.

Assessment & Support

- 30% Continuous Assessment: Includes coding projects, peer reviews, and classwork.
- 70% Final National Examination (Form IV)
- Parents' Role: Support with access to devices and connectivity, and encourage regular practice.

Career Opportunities

Graduates may advance to further studies or enter tech-related roles such as:

- · Junior Software Developer
- Web Developer
- Mobile App Developer
- Technical Assistant
- Coding Instructor
- Digital Content Creator

Learning how to express ideas with impact