

## Computing Studies

### **Broad General Education:**

The S1 and S2 Computing Science courses provide students with the opportunity to explore a wide range of digital technologies while developing important computing and problem-solving skills. Across both years, learners study topics including digital literacy, coding with Scratch and Micro:bit, cyber security, web design, game design, pixel art, machine learning, and the impact of technology on society and the environment. Students learn how to design, create, and evaluate digital solutions while building creativity, collaboration, and logical thinking skills.

### **National 4:**

Computing Science helps students develop digital, problem-solving, and programming skills that are essential in today's technology-driven world. Learners explore topics such as coding, cyber security, web design, game development, and emerging technologies while learning how computers and digital systems work. The course encourages creativity, logical thinking, collaboration, and safe use of technology through practical projects and real-world challenges. Students also gain valuable skills that prepare them for further study, training, and future careers in technology and computing industries.

### **National 5:**

National 5 Computing Science helps students develop advanced digital, programming, and problem-solving skills that are highly valued in today's technology-driven world. Learners study topics such as software design and development, web design, cyber security, databases, and computer systems while gaining experience in coding and computational thinking. The course encourages creativity, logical analysis, and teamwork through practical tasks and real-world challenges. Students also develop valuable technical and transferable skills that prepare them for further study, training, and future careers in computing, technology, and digital industries.

### **Higher:**

Higher Computing Science helps students develop advanced programming, problem-solving, and analytical skills that are essential in the modern digital world. Learners study key areas such as software design and development, databases, web development, cyber security, and computer systems architecture. The course encourages logical thinking, creativity, and independent learning through practical coding tasks and real-world computing problems. Students also build strong technical and problem-solving abilities that prepare them for further study, training, and future careers in computing, software development, and technology-related industries.

[Link to Qualifications Scotland information on Computing Science national courses](#)