

**Course Description:** N4/5 Computing Science includes:

**Software Design and Development**

This Unit will develop knowledge, understanding and practical problem-solving skills in software design and development. You will:

- Develop **Programming** skills
- Learn how to use ‘**Computational thinking**’
- **Solving** both simple and complex problems
- **Understand** and explain how programs work
- **Develop** an understanding of how data and instructions are stored in binary form
- Learn about basic **computer architecture**
- Become aware of the different software development **languages/environments** that exist



**Information System Design and Development**

This Unit will develop knowledge, understanding and practical problem-solving skills related to information system design. You will:

- Learn to use a range of **development tools** and software
- Apply **computational thinking skills** to problems
- Implement practical **solutions** using a range of tools
- Learn about and understand **legal and environmental issues** affecting Information Systems
- Tasks will involve some **complex** features of **software**



**Assessment**

N4 – Internal Assessment through a number of Practical Tasks

N5 - Coursework Assignment – 31% | External Question Paper – 69%

**Home Study Expectations**

Students are expected to spend time doing home study in S4, and home study work may be issued throughout the course.

**Possible next level of study** - National 5 or Higher Computing Science

**Wider Achievement Opportunities**

Students have the opportunity to **explore** and **develop skills** in Computing Science through practical exercises which reflect **real-world** scenarios.



**Possible career paths**

Computing Science will be an asset in any future career; specific roles include: 3D Modelling and animation, business analysis, computer aided design, computer games programming, computer games testing, computer hardware engineering, database administration, games production management, IT help desk support, IT support services, IT project management, network management, software engineering, software programming, systems analysis and design, systems development, teaching, web development.