S3 Computing Science

# Course Rationale

# Course Content

* To develop general skills in relation to computational thinking and digital literacy
* To develop simple desktop applications using industry standard programming languages and code.
* To develop simple web site using HTML5 and CSS, inserting various forms of multimedia such as video and audio.
* To create simple relational databases and query them using SQL in order to extract specific information from large quantities of data.
* Hardware, Software, Networking, Security, Environmental and Social aspects related to Computing Science and Digital Technologies.

# Skills

**The following summarise the ‘main’ skills being developed throughout this course**

* By creating application using Microsoft Visual Basic and Visual Studio
* By creating multimedia websites using HTML and CSS
* By creating databases using Microsoft Access
* By using interactive learning tools such as [www.Quizlet.com](http://www.Quizlet.com)
* By using Glow tools: Microsoft Office 365
* By completing World Wide Web research tasks

# Course Assessment

# The course is very practical. There are theoretical aspects which will be taught through a variety of means, teacher led, working together or individually to research, class discussions etc

# Progression

### Most pupils will be sitting work at level 4 which is appropriate for their age/stage and flexible enough to support and stretch pupils as to their needs.

Natural progression would be to:

* NPA (National Progression Award) in Computer Games Development
* NPA Administration and Audio/N5 Administration and IT

# Career Pathways

3D Printing specialist Air Traffic Controller Animator Business Analyst

Ethical Hacker Forensic Computer Analyst Finance Analyst Helpdesk Professional