**Rolling Programme of outcomes and themes**

**Computing – Key Stage 5**

There are three areas computing (Computer science - CS, information technology - IT and digital literacy - DL) – see below.

The area for each term is one of the following areas –

* Functional skills (such as online shopping, internet searches – IT and DL)
* Using technology for enjoyment (Games - DL)
* Following and making instructions (eg follow or producing videos of making food – CS and IT)

These modules are repeated over the three years, as all topics have plenty of scope for different subject matter within each area and relate to the subject aims within KS1 and KS2.

The modules also link to the outcomes of preparing for adulthood – Employment; Friends Relationships and Community; Good Health; Independent Living.

Where appropriate, links to WJEC accreditation have also been highlighted.

Links to H level assessment within communication and life skills, priorities within Key Stage 5, have been identified within the modules.

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|  | **Autumn** | | **Spring** | | **Summer** | |
|  | Theme | Outcomes | Theme | Outcomes | Theme | Outcomes |
| **Year A** | Functional skills – internet searches for a purpose eg. Decorate a room, find out directions, food shopping, plan for an event etc. | **Encounter / Experience (H1-3)**  All students will:  use computing equipment safely, use technology to generate a visual and/or auditory effect, make something happen using technology, anticipate a reaction, be supported to take their turn, expect an outcome and repeat an action for a specific reward.  **Explore / Experiment (H4-7)**  Some students will:  Be supported to search for and save information about a specific topic. Be supported to present their information to others. Be supported to understand that some information sources are more useful than others  **Develop / Apply (H8 and above)**  A few students will be able to:  Be able to use online resources safely and independently. Search for, and save, specific information, and present their information to others with limited (or no) support. Begin to understand that some information sources are more useful than others. | Using technology for enjoyment –  Games, art, multimedia, photograph, videoing, music etc. | **Encounter / Experience (H1-3)**  All students will:  use computing equipment safely, use technology to generate a visual and/or auditory effect, make something happen using technology, anticipate a reaction, be supported to take their turn, expect an outcome and repeat an action for a specific reward.  **Explore / Experiment (H4-7)**  Some students will:  take part in a variety of activities that they find enjoyable using electronic devices. Be supported to make choices about what they enjoy doing. Be supported to use electronic devices in a creative way.  **Develop / Apply (H8 and above)**  A few students will be able to:  be independent in choosing activities they enjoy using electronic devices, and using the devices creatively. | Following and making instructions – Algorithms for everyday tasks eg. Make sandwich, create dance, clean teeth, beebots etc. | **Encounter / Experience (H1-3)**  All students will:  use computing equipment safely, use technology to generate a visual and/or auditory effect, make something happen using technology, anticipate a reaction, be supported to take their turn, expect an outcome and repeat an action for a specific reward.  **Explore / Experiment (H4-7)**  Some students will: follow and create instructions (algorithm) with support.  **Develop / Apply (H8 and above)**  A few students will be able to: follow and create instructions (algorithm), with minimal support, or independently |
| **Year B** | Functional skills – internet searches for a purpose eg. Decorate a room, find out directions, food shopping, plan for an event etc. | **Encounter / Experience (H1-3)**  **Explore / Experiment (H4-7)**  **Develop / Apply (H8 and above)**  *Same as year A* | Using technology for enjoyment - Games, art, multimedia, photograph, videoing, music etc. | **Encounter / Experience (H1-3)**  **Explore / Experiment (H4-7)**  **Develop / Apply (H8 and above)**  *Same as year A* | Following and making instructions - Algorithms for everyday tasks eg. Make sandwich, create dance, clean teeth, beebots etc. | **Encounter / Experience (H1-3)**  **Explore / Experiment (H4-7)**  **Develop / Apply (H8 and above)**  *Same as year A* |
| **Year C** | Functional skills  – internet searches for a purpose eg. Decorate a room, find out directions, food shopping, plan for an event etc. | **Encounter / Experience (H1-3)**  **Explore / Experiment (H4-7)**  **Develop / Apply (H8 and above)**  *Same as year A* | Using technology for enjoyment - Games, art, multimedia, photograph, videoing, music etc. | **Encounter / Experience (H1-3)**  **Explore / Experiment (H4-7)**  **Develop / Apply (H8 and above)**  *Same as year A* | Following and making instructions - Algorithms for everyday tasks eg. Make sandwich, create dance, clean teeth, beebots  etc. | **Encounter / Experience (H1-3)**  **Explore / Experiment (H4-7)**  **Develop / Apply (H8 and above)**  *Same as year A* |

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| **KS1** | | **KS2** |
| CS | Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions  Create and debug simple programs  Use logical reasoning to predict the behaviour of simple programs | Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts  Use sequence, selection, and repetition in programs; work with variables and various forms of input and output  Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs  Understand computer networks including the internet; how they can provide multiple services, such as the World Wide Web  Appreciate how [search] results are selected and ranked |
| IT | Use technology purposefully to create, organise, store, manipulate and retrieve digital content | Use search technologies effectively  Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information |
| DL | Recognise common uses of information technology beyond school  Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies | Understand the opportunities [networks] offer for communication and collaboration  Be discerning in evaluating digital content  Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact |