Digital Learning

# Course Overview

* **Exam Board** – N/A
* **Usual Age Range** – 14-16
* **Qualification** – Equivalent to 1 Assessment
* **Curriculum Time** –1 hour lessons per week in class plus additional work in Independent Learning Time
* **Assessment**

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| --- | --- | --- | --- |
| Component | Marks | Weight | Description |
| Python | 0 | 33% | A thorough overview of key Python principles ie: variables, loops, data types, arithmetic, functions and IDEs |
| HTML & CSS | 0 | 33% | An overview of website development. Students are urged to complete an ongoing website’s development while learning HTML & CSS keywords |
| Adobe Photoshop | 0 | 33% | An overview of all of the tools and ideas involved in Photoshop to help students that are more interested in the graphical component of Computer Science |
| Further Python | 0 | 33% | A more rigorous overview of further Python principles ie: complex arithmetic, serial files, randomness, nested loop constructs etc. |
| Databases & SQL | 0 | 33% | An overview of database development. Students are urged to develop a database based off of a case study to understand queries and GUI |
| App Development | 0 | 33% | Students are asked to create a project based off of any of the 4 concepts visited in the course and produce an original piece of work to be reviewed. |

* **Grading** – Pass / Fail
* **Full specification** – See below for full spec

# Curriculum Intent

In our rapidly evolving world, digital literacy is no longer a luxury, but a necessity. This Digital Learning course at UTC empowers young people aged 14-16 to become active participants and creators in the digital landscape. We go beyond basic computer use, diving into the exciting realms of Python programming, database management, Photoshop design, and HTML coding.

This dynamic curriculum offers more than just **technical** skills. Through hands-on projects and collaborative challenges, you'll hone your **critical** **thinking**, **problem-solving, and communication skills**. Whether you're debugging code, crafting eye-catching visuals, or building a dynamic website, you'll learn to approach problems with logic and creativity, becoming a confident navigator in the digital world.

This journey into the heart of technology cultivates not just competence, but a genuine **passion** for computing. By understanding the inner workings of code, manipulating data with purpose, and breathing life into digital creations, you'll uncover the beauty and logic hidden within lines of text and pixels. This newfound passion will fuel your future endeavours, opening doors to exciting careers in coding, design, web development, and beyond.

Beyond the classroom, this course serves as a springboard for your future. Whether you choose to pursue A-Level Computer Science or enter the workforce directly, you'll be equipped with essential skills and experiences that make you stand out. Your coding prowess, design expertise, and digital fluency will be in high demand, preparing you for success in an increasingly tech-driven world.

# Study Tips

The below links will be helpful to those studying Computer Science:

* IDE - <https://replit.com/~>
* Programming Resources - <https://www.w3schools.com/python/>

# Curriculum Overview

**Year 10:**

**Year 11:**

**Justification of Sequence**

* The course’s origins are in direct response to the allocated hours allotted for KS4 for Computer Science. As the department’s size is so small, we cannot allocate the necessary hours to directly teach students a substantial KS4 Computer Science syllabus
* The course directly informs the skills and concepts for a digital age as well as helps students that may be interested in the A-Level Computer Science course to be fully equipped with the language and skillset to properly approach it.
* There is a project element to each course in order to apply their understanding to a final result. To have something tangible is useful for portfolio purposes and proof of assessment