

Yardleys Curriculum Aims

- To achieve academic excellence
- To educate the 'whole child' so they are ready for life
- To work collaboratively and ethically to provide education of the highest standard

IT – KEY STAGE 4

Curriculum Overview

INTENT: Through our ambitious computing curriculum our learners will have access to a broad and balanced range of topics including digital literacy, computational thinking and modern technology. Yardley's computing curriculum will provide students with an understanding of how computing underpins today's modern lifestyle and has made the world better, faster and more connected. We ensure that the students at Yardleys can develop to become masters and creators in this field, to aid them in their development of our rapidly changing technological world.

Year 10

In Year 10 students will develop their understanding of what makes an effective user interface and how to effectively manage a project. They will use this understanding to plan, design and create a user interface. Alongside this, students will explore how organisations use digital systems, and the wider implications associated with their use.

	Component 1 - Exploring User Interface Design Principles and Project Planning Techniques Component 3 - Effective Digital Working Practices	Component 1 - Exploring User Interface Design Principles and Project Planning Techniques Component 3 - Effective Digital Working practices	Component 2 - Collecting, Presenting and Interpreting Data Component 3 - Effective Digital Working practices
SUBSTANTIVE KNOWLEDGE	• User interface • Audience and purpose • Design principles • Project plans • Developing a user interface • What is a review	• User interface • Audience and purpose • Design principles • Project plans • Developing a user interface • What is a review	• Spreadsheets • Dashboards • Draw conclusions • Make recommendations • Conditional formatting • BIDMAS

DISCIPLINARY KNOWLEDGE	- Assess how effectively two different types of user interface meet the design principles and user needs - Use project planning techniques to plan and design a user interface - Develop and refine an effective user interface - Be able to review a user interface	- Assess how effectively two different types of user interface meet the design principles and user needs - Use project planning techniques to plan and design a user interface - Develop and refine an effective user interface - Be able to review a user interface	- Create and modify spreadsheets - Understand how presentations affect understanding - Create a dashboard using data manipulation tools - Analyse and manipulate data - Use advanced functions such as V-LOOKUP, COUNT, COUNTIF, COUNTA etc functions - Use a range of tools to create graphs to analyse data
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Year 11

In Year 11 students will understand the characteristics of data and information and how they help organisations in decision making. They will use data manipulation methods to create a dashboard to present and draw conclusions from information. Alongside this, students will continue to explore how organisations use digital systems, and the wider implications associated with their use.

	Component 2 - Collecting, Presenting and Interpreting Data	Component 3 - Effective Digital Working practices	
SUBSTANTIVE KNOWLEDGE	- Spreadsheets - Dashboards - Draw conclusions - Make recommendations - Conditional formatting - BIDMAS	- Modern technologies - Cybersecurity - Wider implications of digital use - Planning and communication in digital systems	
DISCIPLINARY KNOWLEDGE	- Create and modify spreadsheets - Understand how presentations affect understanding - Create a dashboard using data manipulation tools - Analyse and manipulate data - Use advanced functions such as V-LOOKUP, COUNT, COUNTIF, COUNTA etc functions - Use a range of tools to create graphs to analyse data	- How current and modern technologies are used by and have an impact on organisations and their stakeholders - Understand how the increased reliance of organisations on digital systems to hold data and perform vital functions presents a range of challenges and dangers - Understand the wider implications of digital systems and their use - Understand how individuals in the digital sector plan solutions and communicate meaning and intention	