



Subject: OCR Cambridge Nationals Information Technologies Level 1/2 Certificate

Year Group: **KS4 - Year 10 & 11**

Curriculum Intent:

Develop learner's knowledge, skills and understanding through key computational concepts and experience. To ensure that all learners have sufficient knowledge to stay safe online and use computers safely in their lives. Develop resilient learners who are able to recover from mistakes and effectively solve problems. To give learners the opportunity to develop their capability, creativity and knowledge in computing and information technology.

College Values:

Within Computing we have high expectations that students display stewardship towards all resources provided. We develop students skills and capability to work collaboratively and show love and respect for one another.

Knowledge and Skills:

Throughout the course students need to develop knowledge and understanding about the project life cycle and how to use Microsoft Office applications.

The Knowledge students need to demonstrate to the exam board are:

- LO1 (R012) Understand the tools and techniques that can be used to initiate and plan solutions
- LO2 (R013) To be able to initiate and plan a solution to meet an identified need
- LO3 (R012) Understand how data and information can be collected, stored and used
- LO4 (R012) Understand the factors to be considered when collecting, processing and storing data and information
- LO5 (R013) To be able to import and manipulate data to develop a solution to meet an identified need
- LO6 (R012) Understand the different methods of processing data and presenting information
- LO7 (R013) To be able to select and present information in the development of the solution to meet an identified need
- LO8 (R103) To be able to iteratively review the development of the solution



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The skills students will develop through this course can be seen below in the grid format:

LEVEL 1		LEVEL 2		
Basic Formula (+,-,/*) and Relative cell references, BODMAS (KS3)	Built in functions (KS3) i.e. SUM, AVERAGE, MIN, MAX	Absolute cell references	Advanced functions i.e. SUMIF, VLOOKUP, INDEX, MATCH	Cross spreadsheet referencing, What IF modelling, macros
Basic formatting and set up of spreadsheet/database (KS3)	Setting basic data types (KS3)	Conditional formatting		
	Appropriate naming conventions			
		Data validation (range and complexity increasing)		Input masks
	Sorting on one piece of data	Sorting across number of pieces of data		
	Boolean operators (KS3)	Relative operators		
Single table database (KS3)	Multiple table database			
Primary key setting (auto gen) (KS3)	Primary Key USER set but may not be wholly appropriate		Primary key USER set and will be wholly appropriate	
	Single criteria query (KS3)	Multiple criteria query	Multiple criteria ACROSS tables	Paramater query
Simple charts (KS3) (bar chart, pie chart)	Complex charts (relevant labelling, formats, live data updates)		Combination charts	Pivot table
Simple forms (KS3)	Across table forms		Across table forms with multiple data entry methods	
Simple reports (KS3)	Customised reports		House styled and customised reports	
	Access Levels: password access, read only, read and write, shared, locked cells/areas			
Input messages and error messages used/edited (KS3)		Menus and labels	Switchboards created and formatted	
Basic testing (data entered) (KS3)	Test plans - Expected results/actual results		Using range of test data (normal, extreme, erroneous, user) Actions taken. Retests	
Basic use of software for task (KS3)	Appropriate selection of software for task		Totally appropriate choice of software AND features for task	
Structure and use of HTML (KS3)	Hyperlinks, hotspots, buttons, images, sound, video		Structure and use of CSS for formatting and layout	
Appropriate use of basic formatting skills: colour, borders, fonts, emphasis, backgrounds, alignment, positioning, bullets, fills, shadows, text wrapping (KS3)		Advanced formatting: heading styles, auto applied fields, layers, rotation, tables, page breaks, paragraphs, header/footer, watermarks, footnotes, captions		
Set up: margins, orientation, page numbers (KS3)		Appropriate house style		
Spell check, proof read (KS3)	Grammar check		Readability check	
Basic use of email: send, reply, forward, subject, correctly written (KS3)	Use of email: CC, BCC, attachments	Auto response, signatures		Rules
		Mail merge	Multiple document linkage/integration	
Use of software generated templates (KS3)	Master pages / slides CREATED but not necessarily appropriate (KS3)	Master pages/slides CREATED that are appropriate to context	Master pages/slides CREATED and consantly applied to product	
Slide transition and animation effects		Appropriate and consistent use of transition and animation effects		
Media contains issues (pixelated, missing aspects)	Appropriate use of different media: insert, edit placement		High quality media use	
		Embedded media		
	Access levels: password access, read only, read and write, shared, locked aspects			
Linear presentation	Appropriate non linear presentation			Branching presentations
	Speakers notes			
Basic use of software for task to communicate information	Appropriate selection of software for task to communicate information		Totally appropriate choice of software AND features for task to communicate information effectively	

These skills will be assessed throughout the course.

Assessment:

Students will be assessed during lessons both verbally and with the work they complete. More formal assessments will take place in the form of end of topic and term assessments.

The formal assessments will take place during year 11:

R012 - External Exam worth 50% of the overall grade.

R013 - Internal Assessment worth 50% of the overall grade.

Homework:

All Homework will be set via Google Classroom and Show My Homework.





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Cultural Capital:

From the beginning we focus on ensuring our students are aware of the ethical, moral and legal issues relating to computer systems, business and digital design. As well as being regularly reminded of the personal safety issues whilst using the internet and all types of technology.

A solid understanding of how technology affects the real world is vital for students to be able to succeed once they leave us.