

## Y10 OCR Cambridge Nationals in IT (2022)

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
<b>Dates</b>	Monday 5 <sup>th</sup> September – Friday, 21 October 2022	Monday, 1 November – Wednesday, 21 December 2022	Monday, 9 January – Friday, 10 February 2023	Monday, 20 February – Friday, 31 March 2023	Monday, 17 April – Friday, 26 May 2023	Monday, 5 June – Friday, 19 July 2022
<b>Weeks</b>	8	7	7	6	5	6
<b>Lessons</b>	20 lessons	17 Lessons	17 Lessons	15 Lessons	13 Lessons	15 Lessons
<b>Inset</b>						
<b>Unit Title</b>	Unit R070: Using Augmented Reality to present information	Unit R070: Using Augmented Reality to present information	Unit R060: Spreadsheets	Unit R060: Spreadsheets	Unit R060 and R070: Prepare for submission	R050: IT in the Digital World
<b>Sequence</b>	<p>Purpose and uses of Augmented Reality (AR)            The purpose of AR            The sectors where AR can be used in            Uses of AR            Types of Augmented Reality (AR) and user interaction            Devices used with Augmented Reality (AR)</p> <ul style="list-style-type: none"> <li>• Mobile devices</li> <li>• Smart devices</li> <li>• Laptop / PC</li> </ul> <p>Planning and designing the AR            Prototype            Design Tools:            Mind Maps            Mood boards            Visualisation diagrams            Storyboards            Wireframes            Flowcharts</p>	<p>Design Tools continued:            Planning and design considerations.            Purpose and user requirements.            Target audience</p> <p>Creating the AR prototype            Marker            Triggers            Layers            User Interaction            Output</p> <p>Testing:            Technical Testing            User testing</p> <p>Evaluation/Review</p>	<p>Review work and submit for assessment.</p> <p>Spreadsheet task R070</p> <p>Purpose of Spreadsheets            Uses of spreadsheets            Where spreadsheets are used</p> <p>Planning and designing the spreadsheet solution            Design Tools:            Mind Maps            Mood boards            Visualisation diagrams            Storyboards            Wireframes            Flowcharts</p> <p>functional design of spreadsheet solution            design of system output(s)            design of Human Computer Interface</p>	<p>Creating the spreadsheet solution tools and techniques to create the solution            Data handling and manipulation            Techniques to generate the outputs</p> <p>Charts/graphs            Page layout properties            Adjusting row and column settings            User interface            Buttons            Macros            Hyperlinks            Forms</p> <p>Test the user interface and the technical aspects of the spreadsheet solution            Testing during development            Technical testing            Usability testing</p> <p>Testing after development            Methods used to evaluate the success of the spreadsheet solution            Client requirements HCI design principles and conventions</p>	<p>Update R060 Spreadsheet unit</p> <p>Update R070 Augmented Reality unit</p> <p>Ensure appropriate filenames/folders and prepare for submission</p>	<p>The purpose, importance and use of HCI (Human Computer Interface – also known as User Interface) in application areas</p> <ul style="list-style-type: none"> <li>• Banking</li> <li>• Embedded systems</li> <li>• Entertainment</li> <li>• Fitness</li> <li>• Home appliances</li> <li>• Retail</li> </ul> <p>Hardware considerations:            Display e.g.            Touch screen            LCS            LED            OLED</p>

<p><b>Key Building Blocks</b></p>	<p>The different sectors that use AR The different types of AR How users can interact with AR The different types of devices AR can be used on e.g. phone, tablet, glasses</p>	<p>The purpose and user requirements of an AR product The target audience for an AR product Content and assets required to create an AR product Quality of the assets used to create an AR product Triggers and user interactions required for an AR product Marker-based AR Design tools to support the creation of an AR product Create AR model prototype Test AR prototype Evaluate AR prototype</p>	<p>The purpose and user requirements of a spreadsheet solution The target audience for a spreadsheet solution Information required to create a spreadsheet solution Formula /functions and features of a spreadsheet</p>	<p>Design tools to support the creation of a spreadsheet solution Create spreadsheet solution Test spreadsheet solution Evaluate spreadsheet solution</p>	<p>Review work for each Topic area, design, create, test and evaluate for R060 Spreadsheet unit</p> <p>Review work for each Topic area, design, create, test and evaluate for R070 Augmented Reality unit</p>	<p>A well designed HCI will: Be clear in its layout Consistent in its layout Be simple to use Be user controlled Provide feedback</p>
<p><b>Retrieval Practices</b></p>	<ul style="list-style-type: none"> <li>- Re-cap of skills, assignment and demonstrations using AB Tutor Computer Control to ensure understanding of task</li> <li>- Verbal feedback throughout</li> <li>- Refer to assignment and portfolio of evidence throughout the term</li> <li>- Computing clubs after school to support with understanding and recap of skills</li> <li>- Do Now activities (where appropriate)</li> <li>-- Interleaved theme (scenario)</li> </ul>	<ul style="list-style-type: none"> <li>- Re-cap of skills, assignment and demonstrations using AB Tutor Computer Control to ensure understanding of task</li> <li>- Verbal feedback throughout</li> <li>- Refer to assignment and portfolio of evidence throughout the term</li> <li>- Computing clubs after school to support with understanding and recap of skills</li> <li>- Do Now activities (where appropriate)</li> <li>- Interleaved theme (scenario)</li> </ul>	<ul style="list-style-type: none"> <li>- Re-cap of skills, assignment and demonstrations using AB Tutor Computer Control to ensure understanding of task</li> <li>- Verbal feedback throughout</li> <li>- Refer to assignment and portfolio of evidence throughout the term</li> <li>- Computing clubs after school to support with understanding and recap of skills</li> <li>- Do Now activities (where appropriate)</li> <li>- Interleaved theme (scenario)</li> </ul>	<ul style="list-style-type: none"> <li>- Re-cap of skills, assignment and demonstrations using AB Tutor Computer Control to ensure understanding of task</li> <li>- Verbal feedback throughout</li> <li>- Refer to assignment and portfolio of evidence throughout the term</li> <li>- Computing clubs after school to support with understanding and recap of skills</li> <li>- Do Now activities (where appropriate)</li> <li>- Interleaved theme (scenario)</li> </ul>	<ul style="list-style-type: none"> <li>- Re-cap of skills, assignment and demonstrations using AB Tutor Computer Control to ensure understanding of task</li> <li>- Verbal feedback throughout</li> <li>- Refer to assignment and portfolio of evidence throughout the term</li> <li>- Computing clubs after school to support with understanding and recap of skills</li> <li>- Do Now activities (where appropriate)</li> <li>- Interleaved theme (scenario)</li> </ul>	<ul style="list-style-type: none"> <li>- Re-cap of skills, assignment and demonstrations using AB Tutor Computer Control to ensure understanding of task</li> <li>- Verbal feedback throughout</li> <li>- Refer to assignment and portfolio of evidence throughout the term</li> <li>- Computing clubs after school to support with understanding and recap of skills</li> <li>- Do Now activities (where appropriate)</li> </ul>
<p><b>Key Skills</b></p>	<p>Language &amp; Vocabulary Written communication</p>	<p>Language &amp; Vocabulary Written communication Planning Specialist software skills</p>	<p>Language &amp; Vocabulary Planning Written communication</p>	<p>Language &amp; Vocabulary Written communication Evaluation</p>	<p>Language &amp; Vocabulary Written communication Evaluation</p>	<p>Language &amp; Vocabulary Written communication</p>
<p><b>Literacy</b></p>	<p>Written &amp; Oral communication Tier 2 &amp; 3 vocab development</p>	<p>Written &amp; Oral communication Tier 2 &amp; 3 vocab development</p>	<p>Written &amp; Oral communication Tier 2 &amp; 3 vocab development</p>	<p>Written &amp; Oral communication Tier 2 &amp; 3 vocab development</p>	<p>Written &amp; Oral communication Tier 2 &amp; 3 vocab development</p>	<p>Written &amp; Oral communication Tier 2 &amp; 3 vocab development</p>
<p><b>Numeracy</b></p>	<p>File sizes</p>	<p>File size Timing</p>	<p>Formula / Functions Add, subtract, multiply, divide Dates Time Sort</p>	<p>Formula / Functions Add, subtract, multiply, divide Dates Time Sort</p>	<p>File sizes Version numbers Formula / Functions Add, subtract, multiply, divide Dates Time Sort</p>	<p>Banking HCI</p>

<b>Formative Assessment</b>	Verbal feedback throughout each lesson Re-cap of task and assignment using Computer Control monitoring software	Verbal feedback throughout each lesson Re-cap of task and assignment using Computer Control monitoring software	Verbal feedback throughout each lesson Re-cap of task and assignment using Computer Control monitoring software	Verbal feedback throughout each lesson Re-cap of task and assignment using Computer Control monitoring software	Verbal feedback throughout each lesson Re-cap of task and assignment using Computer Control monitoring software	Verbal feedback throughout each lesson Re-cap of task and assignment using Computer Control monitoring software
<b>Summative Assessment</b>	End of unit grading (portfolio of evidence)	End of unit grading (portfolio of evidence)	End of unit grading (portfolio of evidence)	End of unit grading (portfolio of evidence)	End of unit grading (portfolio of evidence)	Activities and Q/A based on exam topics
<b>Spiritual</b>	Developing knowledge and understanding of how IT has changed the way people interact with technology in their daily lives (including Augmented Reality, Virtual Reality, communication, shopping, gaming, entertainment, education and training, social networking etc.)					
<b>Moral</b>	Learning about appropriate uses of software, malicious use of software and the damage it can cause, and the safe and responsible use of IT.					
<b>Social</b>	Social issues that can affect users of IT, including the use and abuse of personal and private data, cyber bullying etc.					
<b>Cultural</b>	Helping learners to appreciate that IT contributes to the development of our culture and to our highly technological future. How learners need to show cultural awareness of their audience when communicating with IT.					
<b>Ethical</b>	Learning about the ethical implications of the electronic storage and transmission (sending/receiving) of personal information. How IT can affect the quality of life experienced by persons with disabilities and the responsibility to meet individuals' access requirements.					
<b>Economic issues</b>	Learning about making informed decisions about the choice, implementation, and use of IT depending upon cost and the efficient management of money and resources.					
<b>Legislative issues</b>	The main aspects of legislation relating to IT copyright design and patents act and other legislation as it applies to the use of IT e.g. the computer misuse act and data protection act (GDPR).					
<b>British Values</b>	Mutual Respect and The Rule of Law	Mutual Respect and The Rule of Law	Mutual Respect and The Rule of Law	Mutual Respect, Tolerance and The Rule of Law	Mutual Respect and The Rule of Law	Mutual Respect and The Rule of Law
<b>Gatsby 4</b>	Digital graphics, Video and Audio editing, AR Developer	Digital graphics, Video and Audio editing, AR Developer	Spreadsheets, finance, accounting	Spreadsheets, finance, accounting	Spreadsheets, finance, accounting	Digital graphics designer, GUI design, software tester